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Exploring the Association of Victimization and Alcohol and Marijuana Use among  
American Indian Youth Living On or Near Reservations: A Mixed Methods Study

by

Lindsay Nicole Merritt

A dissertation submitted in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy  
in  
Social Work and Social Research

Dissertation Committee:  
Junghee Lee, Chair  
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Portland State University  
2018

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## Abstract

Adolescent substance use research has yet to consider victimization as a potential risk factor contributing to alcohol and marijuana use among American Indian youth living on or near reservations, despite the presence of traumatic experiences, childhood adverse events, racism, and discrimination. Contribution to this lack of attention may be due to little being known about American Indian youth victimization. Even less is known about its association with alcohol and marijuana use in general and for those youth living on or near reservations in particular.

This study utilizes mixed methods with a nationally representative sample of American Indian youth living on or near reservations in the first phase. A qualitative study in the second phase followed up with a group of practitioners serving American Indian youth living on or near a reservation to explore the association between victimization and alcohol and marijuana use. Understanding the perceptions of practitioners presents an opportunity for collaborative knowledge creation on the conceptualization of victimization and its relationship to alcohol and marijuana use.

A secondary data analysis utilizing ordinary least squares regression yielded several significant contributions to alcohol and marijuana user levels when the models were run with the sample intact and when run by gender and compared side-by-side. Extending these findings to a qualitative follow-up produced themes that illustrated practitioner conceptualizations of victimization and perceptions about the influence of these experiences on alcohol and marijuana use among the American Indian youth they

serve. Study findings inform or enhance substance use treatment design, delivery, and policy, and to advocate for tribal sovereignty and self-determination.

## Acknowledgements

There are no words to describe how grateful I am to my community partner for collaborating with me on this dissertation research. This dissertation would not have been completed if it were not for the amazing practitioners who supported this study: Aaron Noisey, Joann Malumaleumu, and Becky Greear. Their loving support kept us afloat over the years, especially when things did not go as we had originally planned. I am forever inspired by their commitment to advancing the health and well-being of American Indian youth, their families, and communities. I look forward to our continued work together.

I wish to express a deep appreciation and gratitude for my dissertation chair, Dr. Junghee Lee. Throughout the years, she has offered guidance, patience, and support that both honored and respected my self-determination as a developing researcher. Dr. Lee believed in me to implement my dissertation study and to make the right decisions even when I struggled to believe in myself. Our meetings always left me energized and empowered. My gratitude likewise extends to the members of my PhD cohort, Katie Winters, Emily Lott, and Andre Pruitt, who surrounded me with loving support and encouragement over the years. And to the members of my committee who kept pace with me to the end. I also want to thank my friends and family for their kind patience and understanding with my absence during this educational journey and for believing in me to complete this dissertation.

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## CHAPTER 1. INTRODUCTION

### Problem Statement

Alcohol and marijuana use among American Indian youth remains a significant social concern. High rates of lifetime prevalence, frequency, and levels of alcohol and marijuana use (Beauvais et al., 2004; Friesse & Grube, 2008; King et al., 2014; Swaim et al., 1993) continue to alarm elders, tribal leaders, community members, researchers, and scholars. A study conducted by Friesse and Grube (2008) found that American Indian youth were nearly twice as likely to have engaged with alcohol in their lifetime when compared to White youth. Differences in why populations of youth may be using have been attributed to historical and social contexts (Whitbeck, Hoyt, McMorris, Chen, & Stubben, 2001; Whitbeck, Walls, Johnson, Morrisseau, & McDougall, 2009), as well as differences in cultural definitions of normative and pathological behavior regarding the use of alcohol and marijuana (O'Neill & Mitchell, 2005). Considerations have left some researchers to posit gender socialization and cultural expectations to be contributors to alcohol and marijuana use in general and to the kinds of substances used by male or female youth specifically (Kulis, Okamoto et al., 2004; O'Neill & Mitchell, 2005; Walls, 2008).

Perceived discrimination, historical loss, and ethnic identity are emerging areas of interest among researchers as potential risk and protective factors related to alcohol and marijuana use among American Indian youth. Driving this inquiry is the

increased recognition of the traumatic impacts of colonialization, systemic racism and discrimination on alcohol and marijuana use. For instance, a study suggested a link between perceived discrimination and early-onset substance use for reservation-based American Indian youth living in the Midwest of the United States and Native youth living on a reserve in Canada (Whitbeck, Hoyt, et al., 2001). In a study investigating historical loss, Whitbeck and colleagues (2009) found a linkage with depression. Unfortunately, protective components like ethnic identity have been difficult for researchers to pin down, yet the findings are promising. Studies from the literature suggest that American Indian youth who reported a strong ethnic identity also reported greater sanctions against using alcohol and other drugs (Kulis, Hodge, Ayers, Brown, & Marsiglia, 2012; Kulis, Napoli, & Marsiglia, 2002). On the other hand, there is evidence to likewise suggest there is no direct relationship between ethnic identity and substance use abstinence among American Indian youth (Baldwin, Brown, Wayment, Nez, & Brelsford, 2011; Yu & Stiffman, 2007). Helping to shape researchers' understanding is movement away from generalized or ambiguous measures of identity in favor of key cultural elements (e.g. religious practice) relevant to American Indian youth and their communities (Walters, Simoni, & Evans-Campbell, 2002).

### Exploring Alcohol, Marijuana Use, and Victimization

A large body of evidence has demonstrated that youth who have been victimized are at-risk for developing substance use disorders (Fenton, Geier, Keyes, Skodol, Grant, & Hasin, 2013; Shin, Edwards, & Heeren, 2009; Tharp-Taylor, Haviland,

& D'Amico, 2009) and mental health challenges (Evans, Smokowski, & Cotter, 2014; Luk, Wang, & Simons-Morton, 2010), are more likely to engage in high risk or delinquent behaviors (Begle et al., 2011; Bensley, Eenwyk, Spieker, & Schode, 1999), and are more likely to have thought about or have engaged in suicidal behavior (Bensley et al., 1999; Brockie, Dana-Sacco, Wallen, Wilcox, & Campbell, 2015). Further, youth with multiple types or repeated experiences of victimization over time are at an even greater risk for poor health outcomes due to the increased likelihood for depression, anxiety, low self-esteem, and early-onset substance use (Bouffard & Koeppel, 2012; Evans et al., 2014; Wright, Fagan & Pinchevsky, 2013). Similarly, victimization among American Indian youth has been associated with elevated rates of alcohol and marijuana use (Beauvais et al., 2004; Friese & Grube, 2008; King et al., 2014; Swaim et al., 1993), suicidal thoughts and behaviors (Bensley et al., 1999; Brockie et al., 2015; Pharris, Resnick, & Blum, 1997; Yoder, Whitbeck, Hoyt, & LaFromboise, 2006), feelings of powerlessness and low self-esteem (Bell et al., 2014), and emotional characteristics such as anger (Whitbeck et al., 2001) and depression (Bell et al., 2014).

Majority of the research from the victimization literature is heavily influenced by non-Native researchers applying non-Native frameworks to mostly non-Native youth; and since this is the discovery, caution must be exercised when engaging with the findings. Reviews for this dissertation research did not return studies that meaningfully included American Indian youth in general and reservation-based American Indian youth specifically. Furthermore, studies have relied heavily on quantitative research. Mixed methods approaches may offer deeper insights and afford transformational change to our

understanding of victimization and alcohol and marijuana use among reservation-based American Indian youth.

### Purpose of the Study

The deleterious impacts of victimization on the health and well-being of non-Native youth has long been documented. Yet, despite the presence of traumatic events in reservation-based American Indian communities, American Indian youth have been overlooked (Manson, Beals, Klein, Croy, & AI-SUPERPPF Team, 2005). Understanding how victimization influences alcohol and/or marijuana use among youth in this population may assist to elucidate this potential risk factor.

The overall aim of this exploratory mixed methods dissertation study is to test the association between victimization and alcohol and marijuana use, and to extend the findings to examine the perceptions of practitioners serving reservation-based American Indian youth on how they believe victimization has influenced the youth's alcohol and/or marijuana use. To meet the needs of this research, an exploratory sequential quantitative priorities model with a qualitative follow-up (QUANT → *qual*) was selected. The purpose for incorporating these methods is for bringing a deeper insight into the phenomena than would otherwise be achieved if one method were relied on.

Data for the first phase study consisted of a publicly available data set. Qualitative data in the second phase were collected with practitioners from an online survey with an optional in-person interview to explore youth victimization experience, its influence on alcohol and/or marijuana, and to learn who or what in the community encourages alcohol

and/or marijuana abstinence. Hearing from practitioners who work directly with American Indian youth living on or near the reservation is salient to the study as their experiences and perspectives provide important insights on culturally sensitive research and program development.

### Significance of the Study

It is assumed that non-Native conceptualizations of victimization do not reflect the experiences of American Indian youth, especially for those who are living on or near reservations, contributing to challenges affecting alcohol and marijuana use reduction. While a plethora of evidence exists linking victimization to substance use, there is no meaningful inclusion of American Indian youth in these studies. The absence of American Indian youth raises the question as to whether victimization requires re-conceptualization, and whether re-conceptualization would contribute to understanding alcohol and marijuana use, a relationship conceived as complex and nuanced. Likewise, significant is the contribution of this study to a much needed body of mixed methods substance use and victimization literature.

Phase one of the study is the first to utilize a nationally representative sample of self-identified American Indian youth in a study exploring victimization and alcohol and marijuana user levels. Until now, American Indian youth were either relegated to the ‘other’ category or were absent. Phase two significance is that the voices of practitioners are seldom heard despite how closely they work with American Indian youth in tribal contexts. As a non-Native social worker, who will be representing the



perceptions of practitioners in the second phase of the study for this dissertation, I employ a mixed methods approach involving a qualitative phase that allows for collaborative and participatory knowledge creation between myself and the practitioners. This phase addresses the lack of practitioner voice in substance use research and the limited knowledge about American Indian youth victimization. This researcher believes that American Indian communities are the experts on their own lives and on what works best for their communities.

### Relevance to Social Work

Despite the history of social work in Indian Country, it was not until 2009 that the National Association of Social Workers (NASW) developed a policy statement in support of tribal health and sovereignty (NASW, 2009). This policy provides brief historical information on Indigenous groups including American Indian and First Nations Peoples, the Kanaka Maoli (Native Hawaiians), Alaska Natives, the Chamours of Guam, the Taino Indians of Puerto Rico, and American Samoans. Imploring non-Native social workers to recognize the dramatic and injurious effect of colonization on the health and well-being of Indigenous peoples, this policy statement describes the loss of ancestral lands, culture, self-governance, and self-determination. Basic human rights to spiritual, emotional, and physical health and well-being were likewise lost. Practice and policy implications in the policy statement are based on its Code of Ethics. These include:

- advocate for sovereignty;
- identify policies or practices unfavorable for indigenous peoples;
- dialogue with indigenous people regarding sovereignty;

- understand the expectation that non-Native social workers will be knowledgeable and aware of indigenous peoples' sovereignty;
- understand core value differences between non-Native and indigenous cultures;
- recognize and acknowledge that struggles with sovereignty reflect genocidal acts and ethnic cleansing;
- advocate for traditional healing practices in social work settings;
- support and honor the preservation of traditional spiritual, health, and cultural practices of indigenous people;
- support efforts to educate indigenous people in social work as educators, practitioners, and policymakers;
- and advocate for the inclusion of cultural practices in healthcare (NASW, 2009, p. 337).

Aligning with reservation-based tribal communities supports the social work values of indigenous peoples' self-determination and sovereignty as described in the NASW policy statement above. Rather than exert control over tribal research and evaluation, this researcher is committed to collaboration to bolster the health and well-being of American Indian youth and their communities. To demonstrate this commitment, findings from this dissertation and future studies, under the advisement of local experts and the tribal governing body, will be contributed to both local and global knowledge bases that advocate for the advancement of healing and recovery frameworks

infused with community strengths and knowledge (see Gone & Calf Looking, 2015; Gone, 2007, 2013; Lucero & Bussey, 2012; Lucero, 2011; Walters, Simoni, & Evans-Campbell, 2002).

Social workers are charged with possessing knowledge relevant to the needs of our clients that recognizes their agency and self-determination (NASW, 1999). Exploring victimization and alcohol and marijuana use among American Indian youth is relevant to social workers within substance use treatment settings. To ensure non-Native substance use specialists in particular are well equipped, attention must be paid to all facets of peer reviewed substance use literature, and findings from this study may assist. For instance, descriptions of risk and protective factors that contribute to elevated or reduced alcohol and marijuana use among American Indian youth, inadvertently leave out important contextual realities, realities that likely look different dependent on tribal background. And while risk and protective mechanisms may seem generalizable, practical applications may be limited, and unintentionally adversely affect the conceptualization, development, and implementation of substance use policy and programming in treatment settings. Consulting with tribal partners is strongly recommended to ensure this does not happen.

Finally, findings from this study may be relevant to social work regarding substance use prevention. Proactive prevention strategies have long been sought by many tribal communities for the reduction of substance use. Increased American Indian youth risk perception through prevention messaging and programming is one method in action (Nelson & Tom, 2011). Incorporation of findings from this study into frank discussions may further illuminate youth understanding about experiences that might make them

vulnerable to substance use. If not happening already, discussions may need to be gendered as evidence suggests non-Native male and female youth do not have the same type of victimization experiences (see Duran et al., 2004; Hahm, Lee, Ozonoff, & Van Wert, 2010; Libby et al., 2004; Tubman, Montgomery, Gil, & Wagner, 2004). Findings also suggest that male and female American Indian youth may be using alcohol and/or marijuana at greater rates and for different reasons (see McNulty Eitle & Eitle, 2015; O'Neill & Mitchell, 1996; Walls & Whitbeck, 2011).

## CHAPTER 2. LITERATURE REVIEW

### Introduction

The literature review first describes alcohol and marijuana use among American Indian and Alaska Native youth. Next, a discussion of the risk and protective factors influencing alcohol and marijuana use, as guided and informed by the “indigenist” stress coping paradigm and historical trauma theory, is presented. The subsequent section describes an overview of mixed methods studies, with a focus on American Indian and Alaska Native communities and provides a context for how alcohol and marijuana use can be further studied among American Indian and Alaska Native youth. Finally, the literature review concludes with a summary of the review and implications for research.

### Alcohol and Marijuana Use among American Indian and Alaska Native Youth

Historically, alcohol and marijuana use among American Indian and Alaska Native youth has been troubling. And despite decades of research to better understand and reduce alcohol and marijuana use among youth in this population, initiation and prevalence rates of both substances remains high when compared to non-native youth populations (Stanley, Harness, Swaim, & Beauvais, 2014). Researchers found that American Indian youth were more likely to have engaged in heavy drinking, were more likely to have been intoxicated in the past 30 days (King, Vidourek, & Hill, 2014), and were nearly twice as more likely to have consumed alcohol in their lifetime when compared to White youth, even when controlling for age and gender (Friesen & Grube, 2008). Studies examining marijuana use found, when compared to their non-native

counterparts, that American Indian youth had higher rates of lifetime and 30-day marijuana use (Beauvais, Jumper-Thurman, Helm, Plested, & Burnside, 2004). Wu and colleagues (2015) found, when using a nationally representative sample of youth, that the American Indian youth in their study had higher prevalence rates of marijuana use when compared to other ethnic populations of youth. Further, the American Indian youth in the study were found to have higher past-year prevalence of marijuana use disorder (Wu et al., 2015).

Advancements in our knowledge about alcohol and marijuana use among American Indian and Alaska Native youth have included investigations of grade, gender, and regional differences. For example, Stanley and colleagues (2014) found that the rates for substance use prevalence for nearly all substances was high for the American Indian 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders in their study, with the highest prevalence rates found among the American Indian 8<sup>th</sup> graders, when compared to national rates. Further, both alcohol and marijuana had the highest prevalence rates (above 50%) across all grades of American Indian students again when compared to national rates (Stanley et al., 2014). Findings from the aforementioned study suggest American Indian youth begin using alcohol and marijuana at early ages. Researchers employed statistical analysis methods such as growth curve analyses to learn more about alcohol and marijuana use trajectories across the adolescent developmental timeline. Walls, Hartshorn, and Whitbeck (2013) found that the American Indian youth in their study engaged in both problem alcohol and monthly marijuana use in early adolescence (prior to age 15) and increased in their usage as they aged into young adults (Walls, Hartshorn, & Whitbeck, 2013). And when

Mitchell, Novins, and Holmes (1999) confirmed that the American Indian youth had engaged in early adolescent marijuana use but with a peak in middle adolescence and a decline in usage as the study participants aged into young adulthood.

Differences in alcohol and marijuana use as a function of gender are proving difficult to pin down due to mixed results. Some studies suggest that American Indian and Alaska Native female youth being using alcohol and/or marijuana at ages younger than their male counterparts and at higher rates (Cheadle & Sittner-Hartshorn, 2012; Miller, Stanley, & Beauvais, 2012), while other evidence found that the opposite direction, and, furthermore, suggested American Indian and Alaska Native male youth increase in their rates over time (Mitchell, Novins, Holms, 1999). Additional evidence provides a mixed finding that while American Indian female youth begin using alcohol and/or marijuana at earlier ages and at higher rates, their male counterparts surpass them in later adolescence (Walls, Hartshorn, & Whitbeck, 2013). Researchers interested in a more nuanced and culturally-responsive understanding of the gendered differences of alcohol and/marijuana use among youth in this population argue in favor of including community-specific perspectives on cultural/gendered social expectations (e.g. social gathering, romantic partnering, remaining at home) that may increase exposure and access to alcohol and/or marijuana (Cheadle & Hartshorn, 2012; Mitchell et al., 1999; O'Neill & Mitchell, 1996; Walls et al., 2013).

Regionally, differences in alcohol and marijuana use among American Indian and Alaska Native youth are proving useful in narrowing the focus on to specific problem areas of interest. For example, Miller and colleagues (2012) used a national sample of

American Indian youth living on or near reservations to examine regional differences in the rates of alcohol and other drug use. Findings suggest that American Indian youth living on or near reservations in the Northern Plains and the Upper Great Lakes were more likely to have gotten drunk in their lifetime and in the past 30 days when compared to their counterparts in both the Southwest and Oklahoma regions (Miller et al., 2012). Additional findings also suggest that study participants living in the Northern Plains region were more likely to have ever tried alcohol and marijuana at rates much higher than when compared to American Indian youth living on or near reservations in the Southwest region (Miller et al., 2012). A similar study found that American Indian youth living on or near reservations in Oklahoma were less likely to use alcohol and other drugs; yet when study participants did report using, youth had later age alcohol and drug initiation and reported stronger perceptions of harm from using alcohol and other drugs when compared to non-Oklahoma American Indian youth, despite Oklahoma youth reporting greater access to alcohol and other drugs (Tragresser, Beauvais, Burnside, & Jumper-Thurman, 2010). Community-based prevention messaging and school connectedness are believed to be strong influences on the support and promotion of alcohol and marijuana use abstinence among the Oklahoma American Indian youth as posited by the authors (Tragresser, Beauvais, Burnside, & Jumper-Thurman, 2010).

Although the above findings are helpful in gaining a general understanding of alcohol and marijuana use among American Indian and Alaska Native youth, it is important to point out and discuss the limitations that make it difficult to know its extent and severity. First, existing cultural, historical, and political heterogeneity within and



across American Indian and Alaska Native communities, though discussed often in the implications and future research sections of journal articles as possible explanations of alcohol and other drug occurrence, prevalence, and difference, is seldom taken into account when research is conducted (see Cheadle & Sittner-Hartshorn, 2012; Mitchell, Novins, & Holmes, 1999; Walls, Hartshorn, & Whitbeck, 2013; Whitbeck & Armenta, 2015). Not only does this highlight the potential for inaccurate conclusions, it also illuminates a significant gap in the literature. Lastly, frequency, usage, and prevalence rates of alcohol and marijuana use among American Indian and Alaska Native youth are routinely computed utilizing comparisons made with youth in the general population (see Friese & Grube, 2008; Dieterich, Stanley, Swaim, & Beauvais, 2013; Swaim, Stanley, & Beauvais, 2013). However, important contextual differences between American Indian, Alaska Native, and non-Native youth need consideration. Furthermore, an appropriate comparison would be between American Indian and Alaska Native youth living on or near reservations or in urban settings (see Miller et al., 2012; Tragresser et al., 2010; Whitbeck & Armenta, 2015) due to the historical, cultural, and political contextual influences in and around tribal communities.

### Risk and Protective Factors

American Indian and Alaska Native communities have long embarked on grass roots efforts to better understand individual, family, and community health outcomes among their people (Whitbeck, Adams, Hoyt, & Chen, 2004). Historical trauma theory has been at the heart of this exploration. Providing a firm framework, historical trauma theory has been called upon for learning more about and better understanding the effects

of colonization and near cultural genocide for the purposes of healing and restoration (Brave Heart, 1998; Brave Heart & DeBruyn, 1998; Duran, Duran & Brave Heart, 1998). However, it was not until the seminal works of Dr. Maria Yellow Horse Brave Heart (see Brave Heart, 1998; Brave Heart, 1999; Brave Heart, 2008) and colleagues (see Brave Heart, Chase, Brave Heart & DeBruyn, 1998; Duran et al., 1998; Evans-Campbell, 2008; Whitbeck, Adams et al., 2004) that historical trauma theory in an American Indian and Alaska Native context was developed in and introduced to the academic literature. With these important points in mind, exploring and selecting culturally specific risk and protective factors that have the potential to assist in learning more about alcohol and marijuana use among American Indian youth may prove useful (Whitbeck, Chen et al., 2004). An overview of the selected culturally-responsive risk and protective factors for this study are presented below.

## Risk Factors

### Victimization

Numerous studies have demonstrated the deleterious effects of victimization on the health and well-being of youth (see Begel et al., 2011; Bell et al., 2014; Cwik et al., 2015; Finkelhor et al., 2005; Windle, 1994; Whitbeck, Chen et al., 2004; Whitbeck, Hoyt et al., 2001; Whitbeck, Walls et al., 2009). Early development of the victimization literature tended to focus primarily on either a single experience or the frequency of experiences with violent victimization (e.g. physical/sexual assault, bullying, child maltreatment), and its impact on the health and well-being of children and youth (see Bell & Jenkins, 1993; Duran et al., 2004; Hamburger, Leeb, & Swahn, 2008; Hill & Jones,

1997; Kilpatrick et al., 2000; Libby et al., 2004; Simpson & Miller, 2002; Wolak & Finkelhor, 1998). Criticism of this early research has often pointed to a myopic or narrow view of victimization experiences such that actual experiences of victimization may be misrepresented. Examples include experiences where children or youth are simultaneously or cumulatively exposed to violent victimization (see Begel et al., 2011; Finkelhor, Ormrod, Turner, & Hamby, 2005; Windle, 1994), and victimization experiences (e.g. neglect, emotional abuse, property crimes) that are frequently not documented in the literature (see Begel et al., 2011; Finkelhor, Ormrod, Turner, & Hamby, 2005; Windle, 1994).

As this body of literature has continued to expand over the years, researchers are illuminating victimization experiences not found among the general population. For example, oppressed and marginalized individuals, families, and communities are frequently subject to bias-based (i.e. race/ethnicity, disability, sexual orientation, religion) harassment and/or bullying (Bell et al., 2014; Russell, Sinclair, Poteat, & Koenig, 2012), perceived discrimination (Cordova, Jr. & Cervantes, 2010; Whitbeck, Chen et al., 2004; Whitbeck, Hoyt et al., 2001), historical loss (Whitbeck, Chen et al., 2004; Whitbeck, Hoyt et al., 2001; Whitbeck, Walls et al., 2009), and intense vicarious exposure to suicide (Cwik et al., 2015). Despite this updated victimization literature, there remains a paucity of victimization research that meaningfully includes American Indian and Alaska Native youth. Of the existing sparse studies, the majority of them examining victimization among American Indian and Alaska Native youth, adults, and communities has focused retrospectively on child maltreatment (Duran et al., 2004; Libby et al., 2004), bullying

(Bell et al., 2015); perceived discrimination (Whitbeck, Chen et al., 2004; Whitbeck, Hoyt et al., 2001), and historical loss (Whitbeck, Chen et al., 2004; Whitbeck, Hoyt et al., 2001; Whitbeck, Walls et al., 2009).

In a cross-sectional study to examine the relationship between child abuse and neglect and lifetime psychiatric disorders of American Indian women receiving primary care services, Duran et al. (2004) found that the majority (84.2%) of their sample experienced lifetime mental health challenges, with a smaller proportion (60.7%) meeting the diagnostic criteria for two or more mental health disorders (p. 140). Further analysis revealed that women who reported being maltreated as children were 1.5 to 4 times more likely to have a mental health challenge when compared to women with no history of childhood maltreatment (p. 142). Additionally, the severity and experience of multiple maltreatment types contributed to an increased likelihood of having mental health and/or substance use disorders (Duran et al., 2004). Lastly, these findings held even after controlling for factors known to be associated with mental health challenges (i.e. poverty, education, marital status) and parental experiences with alcohol and parent boarding school attendance (Duran et al., 2004).

While conducting a larger mixed methods pilot study examining the perceptions and demographic, health, and psychosocial correlates among Lumbee youth, Bell et al., (2015) noticed that bullying presented as a major challenge for many of the youth in the study. Analysis of the focus groups transcripts revealed that gay male youth were the most common victims of bullying in the school environment, as were youth who were considered less fortunate or perceived as having exceptional intellect (Bell et al., 2015).

Youth also reported a keen awareness of the relationships between bullying, low self-esteem, depression, and suicide, sharing stories of their own experiences and those of their friends who had committed suicide (Bell et al., 2015). Further, a sense of helplessness was echoed by many youths in the study, but despite this, some were able to ignore the bullying, while others used alcohol and other drugs, violence, or delinquent behaviors to cope with their bullying experiences (Bell et al., 2015, p. 10). Results from the survey did not reveal any significant associations with bullying, though it was found that youth who reported being bullied also reported higher depression and lower self-esteem (Bell et al., 2015).

#### Anticipatory socialization

Peers continue to act as a powerful risk and protective factor for predicting substance use among youth (Bauman & Ennett, 1994; Waller, Okamoto, Miles, & Hurdle, 2003; Warr, 2002). However, the vast majority of these studies have focused on and attempted to extend non-Native constructions of peer networks on to American Indian and Alaska Native youth (see Eitle, Johnson-Jennings & Eitle, 2013; Rees, Freng, & Winfree, Jr., 2014; Spicer, Novins, Mitchell, & Beals, 2003; Swaim, Oetting, Jumper-Thurman, Beauvais, & Edwards, 1993). Extensive kinship and social networks in American Indian and Alaska Native communities in general, but for reservation-based communities specifically, suggests that youth peer networks largely consist of siblings and cousins (Hurdle et al., 2008), and it is that family members may play a more significant role in youth use of alcohol and marijuana (King et al., 2014; Rees et al., 2014; Swaim et al., 1993; Waller et al., 2003). As such, peer influence for this study is

conceptualized as anticipatory socialization or the participants' perceptions of the benefits and desire for social acceptance by using alcohol or marijuana when engaging in social interactions for the purposes of either the development of new peer relationships or for sustaining established peer relationships (Dieterich et al., 2013). In addition, influences by other family members, including parents and extended adult family members (i.e. grandparents, aunt, uncle) as a protective factor are described in detail later in this literature review.

### Anger and Depression

Culturally-responsive strategies to investigate, disentangle, and elucidate direct linkages to alcohol and marijuana use by American Indian and Alaska Native youth have uncovered important relationships between perceived discrimination, historical loss, and the emotional characteristics anger and depression. Although this literature remains small, the studies of Whitbeck and colleagues (see Sittner Hartshorn, Whitbeck, & Hoyt, 2012; Walls & Whitbeck, 2011; Whitbeck, Adams et al., 2004; Whitbeck & Armenta, 2015; Whitbeck, Hoyt et al., 2001; Whitbeck, Walls, Johnson, Morrisseau, & McDougall, 2009) provide notable contributions that serve as an important knowledge base for which to learn and draw from.

In a study investigating the relationship between perceived discrimination and early-onset substance use by American Indian children in 5<sup>th</sup> through 8<sup>th</sup> grades, Whitbeck, Hoyt et al. (2001) found that despite their age, most of the children in the study had already experienced discrimination, with 49% reporting they had been insulted

for being American Indian. An identical percentage of children (49%) reported hearing a racial slur yelled at them, while 14% of children reported being physically attacked (Whitbeck, Hoyt et al., 2001). Bivariate analyses revealed positive associations between discrimination, anger, anxiety/depression, and delinquency, as well as anger and alcohol use (Whitbeck, Hoyt et al., 2001). Further, structural equation modeling revealed a strong association between perceived discrimination, anger, and early-onset substance use, indicating that the children in this study who had experienced discrimination were more likely to respond with anger and delinquent behavior, which, in turn, led to early substance use (Whitbeck, Hoyt et al., 2011, p. 418).

In a subsequent study comparing American Indian youth between the ages of 11-13 years and their female caregivers to investigate depression and historical loss, Whitbeck, Walls et al., (2009) found that the youth experienced historical loss at greater rates than that of their female caretakers. Additionally, bivariate analyses revealed strong associations between youth historical loss, depression, perceived discrimination, and family events (Whitbeck, Walls et al., 2009, p. 11). Lastly, ordinary least squares regression analyses found, after controlling for known factors influencing youth depression, that being female was significantly associated with depression, that perceived discrimination and depression had a strong positive association, and that historical loss and depression also had a strong positive association (Whitbeck, Walls et al., 2009). Although alcohol and marijuana use were not tested, the authors believe the experience of stress related to discrimination is like stress experienced with historical loss such that youth may be at risk for engaging in the use of substances (Whitbeck, Walls et al., 2009).

## Protective Factor

### Family influence

Several studies have demonstrated that sanctions against substance use by family members American Indian youth look up work to protect them from engaging in substance use (Hurdle, Okamoto, & Miles, 2008; Martinez, Ayers, & Brown, 2015; Moon, Blakely, Boyas, Horton, and Kim, 2014; Waller, Okamoto, Miles, & Hurdle, 2003) such that family members may each play a unique, and sometimes “dual,” role in an American Indian youth’s intentions to abstain from using alcohol and marijuana.

In one of the more recent studies of which specific family members had the greatest influence on whether urban American Indian youth used cigarettes, alcohol, and marijuana, Martinez, Ayers, & Brown (2015) found that both parents and grandparents disapproval of substance use influenced the youth’s intentions to not use cigarettes, alcohol, and marijuana. Lastly, when intentions to use each substance were tested individually, it was found that parents had a strong influence on the youth’s intention to not use cigarettes and that grandparents had an even stronger influence on the youth’s intentions to not use alcohol (Martinez et al., 2015).

In a qualitative study utilizing focus group interviewing to study the influence of family on alcohol and other drug use among American Indian students, Hurdle, Okamoto, and Miles, (2008) found that immediate family members, extended family members, and cousins were most discussed as influencing whether youth intended to use substances. Parents were frequently referred to as being a positive influence on a students’ decision to



abstain, often because the student had witnessed their parents' struggles with addiction and did not want to "end up like them" (Hurdle et al., 2008, p. 60). Similarly, witnessing the struggle of extended family members (i.e. auntie, uncle) with drug addiction influenced intentions to abstain (Hurdle et al., 2008). Fear about letting down a grandparent can be a powerful influence. For example, one student shared a story about the time her grandmother wrote a letter to the family about how alcohol and other drugs had ravaged their family and read it aloud to everyone at Thanksgiving. The student reported keeping a copy of the letter in her pocket so she can refer to it any time someone tries to get her to use drugs (Hurdle et al., 2008). These findings highlight the varying, and often positive, influence family members have on one's decision making processes about whether to use alcohol and other drugs.

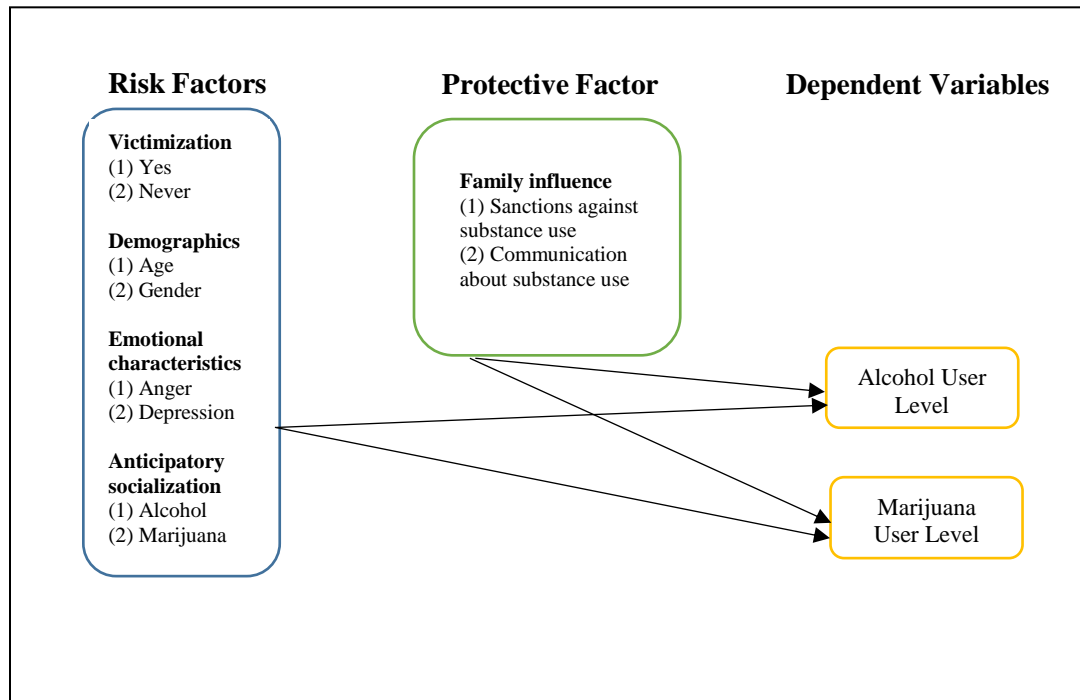


Figure 1. Phase one conceptual framework. This figure illustrates phase one study variables.

## Mixed Methods

Although mixed methods are gaining prominence from researchers and scholars who recognize its potential for transformative social change (see Mertens, 2011, 2012; Mertens & Hesse-Biber, 2012), as well as for its practical functionality (see Morgan, 2007, 2013, 2015), there continues to be a paucity of mixed methods studies investigating substance use (in general) or victimization in American Indian and Alaska Native communities. During the literature review, a single victimization mixed methods study was returned focused on bullying among Lumbee youth (Bell et al., 2015). Of these remaining existing studies, the clear majority have focused on program evaluation (Nelson & Tom, 2011) and for the development of a nutrition intervention for caregivers of American Indian children (Sinley & Albrecht, 2016).

Nelson and Tom (2011) employed a sequential explanatory mixed methods design for their outcome evaluation to investigate the increase of knowledge around HIV/AIDS, Hepatitis, and substance use among a group of 100 American Indian youth between the ages of 13-18 years old who participated in the Gathering of Native Americans (GONA) intervention. Characteristic of a sequential explanatory design is first the collection and analysis of quantitative data, which then informs the subsequent collection and analysis of qualitative data (Creswell, 2008; Morgan, 2014). Quantitative analysis revealed a significant change in knowledge and sexual self-efficacy from the pretest to the six-month follow-up (Nelson & Tom, 2011). Additionally, significant change in perceptions of the risk of using cigarettes, alcohol, or marijuana was also found, with study participants reporting an increase in their perceptions of risk after receiving the GONA

intervention (Nelson & Tom, 2011). Lastly, interviews with these study participants revealed positive changes in knowledge was attributed by youth to the adults' ability to speak with them on their level (Nelson & Tom, 2011, p. 352).

Sinley & Albrecht (2016) utilized a transformative exploratory sequential mixed methods model to develop a culturally responsive nutrition intervention for increasing knowledge and consumption of fruits and vegetables among American Indian children. For this study, researchers began with the collection and analysis of qualitative data to then inform the development of a quantitative instrument (Morgan, 2014). Qualitative data collection consisted of six focus groups with primary caregivers of American Indian children between the ages of 2-5 years old (Sinley & Albrecht, 2016). Several steps were taken in the development of the quantitative instrument. First, researchers created and administered a pilot instrument. Next, they revised and re-administered the instrument a second time. The final step consisted of an analysis of the data collected from the second administration (Sinley & Albrecht, 2016). When findings from both phases were compared, it was revealed that motivation to purchase, serve, and consume fruits and vegetables was related to greater amounts of caregiver knowledge about the quality, the consumption, and the health benefits of fruits and vegetables (Sinley & Albrecht, 2016). Further, it was found that motivation was also related to behavior such that when the caregivers reported feeling confident in their ability to model healthy food choices, confident in their ability to cook, and believed they possessed the skills to successfully offer fruits and vegetables to children, the greater the motivation to serve them to children, all of which the caregivers acknowledged were tied to their own attitudes about

fruits and vegetables (Sinley & Albrecht, 2016). Additional analysis revealed a direct relationship between whether children were consuming fruits and vegetables and the caregiver's feeling efficacious and demonstrating healthy food choice and consumption (Sinley & Albrecht, 2016).

As is illustrated with the previously discussed studies, an advantage of mixed methods research is the ability to dive deeply as knowledge is created collaboratively. Mixed methods was selected as we begin this exploration because this approach intentionally extends findings from one study to validate, expand, or inform future inquiry in what can be thought of metaphorically as a methodological chain. It also offers a systematic and intentional inclusion of all community members, whether they elders, tribal leaders, community members, or youth.

### Summary of Literature Review

As indicated in the literature review, alcohol and marijuana use remains high among American Indian and Alaska Native youth. And while adolescent substance use researchers are advancing our knowledge about alcohol and marijuana use with investigations of differences by grade, gender, and region, heavy reliance on quantitative methods and the frequent use of inappropriate comparisons make it difficult to know the severity of the problem. Moreover, extensions of culturally incongruent frameworks create additional challenges such that important social, cultural, and historical contexts have the potential to be inadvertently dismissed or diminished. Researchers are working to reconcile these limitations by incorporating culturally responsive risk and protective

factors or by utilizing qualitative methods; however, these approaches are often implemented in isolation and independent of one another. Perhaps the use of a mixed methods approach can act as a practical strategy for addressing methodological challenges and for the expansion of adolescent substance use, specifically for the expressed purpose of contextualizing the unique and varied experiences of American Indian and Alaska Native youth through the combination of both voices and numbers.

## CHAPTER 3. THEORETICAL FRAMEWORK

### Introduction

Alcohol and marijuana use among American Indian and Alaska Native youth may be examined through the “Indigenist” Stress Coping Paradigm (Walters, Simoni, & Evans-Campbell, 2002) and Historical Trauma Theory (Brave Heart, 1998/2008). Both the “indigenist” stress coping paradigm and historical trauma theory provide a distinct focus on important sociohistorical and contemporary contextual factors impacting health outcomes (Big Foot, 2000; Duran, Duran, & Brave Heart, 1998; Poupart, 2003) and cultural buffers that protect and heal (Walters, Simoni, & Evans-Campbell, 2002). The following will explain the major premises of the “indigenist” stress coping paradigm and historical trauma theory.

### “Indigenist” Stress Coping Paradigm

The “Indigenist” Stress Coping Paradigm (Walters, Simoni, and Evans-Campbell, 2002), functions as a decolonized framework that expands upon the previous work of Dinges and Joos (1988), and Krieger (1999) to examine the interplay between American Indian individuals, stress, and coping. This paradigm likewise examines impacts of the interplay on substance use and associated health outcomes. The indigenist lens explicitly acknowledges native people as colonized, and promotes tribal self-determination, agency, and sovereignty (Walters, Simoni, & Evans-Campbell, 2002). According to Walters, Simoni, and Evans-Campbell (2002), the “indigenist” stress coping paradigm posits that “associations between traumatic life stressors and adverse health outcomes are moderated

by cultural factors that function as buffers, strengthening psychological and emotional health, decreasing substance use, and mitigating the effects of traumatic stressors” (p. S106). Traumatic life stressors include historical trauma, contemporary oppression, racism, and discrimination, child maltreatment, violent crimes, and unresolved historical loss and grief (Walters, Simoni, & Evans-Campbell, 2002). Cultural buffers include family and community, spiritual and traditional ritual and practice, enculturation, and group identity attitudes (Walters, Simoni, & Evans-Campbell, 2002). To date, Walters and Simoni are the only researchers to have used this framework in their work to re-conceptualize Native women’s health (see Walters & Simoni, 2002). Regarding American Indian youth specifically, the “indigenist” stress coping paradigm can serve as a useful framework to contextualize alcohol and marijuana use and victimization experience.

### Historical Trauma Theory

Historical trauma theory and research suggests that colonization of North America by European settlers can help to explain the disparate health outcomes found in many American Indian and Alaska Native communities in the United States (Big Foot, 2000; Duran, Duran, & Brave Heart, 1998; Poupart, 2003). Descriptions found in the literature of distal and proximal policies and practices employed against tribal nations include taking of lands and resources, the boarding school era, the prohibition of spiritual and religious ceremonies, and ongoing structural barriers linked to the denial of tribal sovereignty and self-determination (Big Foot, 2000; Duran et al., 1998; Evans-Campbell, 2008; Gone, 2013; Pewewardy, 2014). Research in historical trauma concludes that these

events have resulted in a cumulative cluster of proximal trauma symptoms that are then transmitted intergenerationally at individual, family, and community levels (BigFoot, 2000; Brave Heart, 1998; Duran et al., 1998; Evans-Campbell, 2008; Gone, 2013; Poupart, 2003). Evans-Campbell (2008) proposes the use of a multilevel framework that comprises individual, familial, and community relationships central to American Indian and Alaska Native communities when examining social concerns. In fact, researchers have long emphasized the interactive processes between individual, family, and community, and between risk and protective factors (BigFoot, 2000; Brave Heart, 1998; Duran et al., 1998; Evans-Campbell, 2008; Gone, 2013; Poupart, 2003). Researchers view historical trauma not as a fixed attribute but as alterable and emphasize intentional acts of de-colonization (i.e. return to the “old ways”) as the antidote against the ravages of colonization (Brave Heart, 1998/2008; Deloria & Wildcat, 2001; Gone, 2007/2013).

Numerous researchers have utilized the historical trauma framework to guide and inform their studies with tribal nations in healing and health outcomes, as well as for the development of culturally responsive and relevant historical trauma measures (Brave Heart, 1998, 2003, 2008; Brave Heart, Chase, Elkins, & Altschul, 2011; Borowsky, Resnick, Ireland, & Blum, 1999; DeBruyn, Hymbaugh, & Valdez, 1988; Evans-Campbell, 2008; Gone, 2013; Sotero, 2006; Whitbeck, Adams et al., 2004, Whitbeck, Chin et al., 2004; Whitbeck, Walls et al., 2009). Additionally, since American Indian and Alaska Native health outcomes are disproportionately different from non-Native health outcomes (Borowsky, Resnick, Ireland, & Blum, 1999; Gone, 2013), it is critical to “expand our focus from isolated events and their impacts to the compounding effect of



numerous events over time” (Evans-Campbell, 2008, p. 321). Thus, several indigenous scholars and researchers suggest that simplistic attempts at viewing traumatic events through an individualized and reductionist lens may lead to limited interpretation and understanding of the experiences relevant to tribal nations (Deloria & Wildcat, 2001).

On the other hand, several scholars implore researchers to use caution as they apply a historical trauma framework to investigations of social concerns in American Indian communities (see Kirmayer, Gone, & Moses, 2014; Maxwell, 2014). Historical trauma theory, they say, can be limiting and narrow in its framework because of the distinct differences between the groups who have been subject to similar traumatic events (e.g. Holocaust survivors and their descendants), their ability to assimilate, and their ability to join the local diaspora (Kirmayer et al., 2014). Moreover, the caution against a blanket application of historical trauma theory to a social concern of interest in American Indian communities is to deter researchers from potentially marginalizing ongoing systemic and structural racism and discrimination impacting contemporary American Indian communities today (Kirkmayer et al., 2014; Maxwell, 2014). It is also to require researchers to be explicit in their use of the theory because of past misuses (and abuses) of the theory to further stigmatize and to support policies negatively affecting American Indian communities (Maxwell, 2014).

#### Overview of Framework Integration

The “indigenist” stress coping paradigm and historical trauma theory present opportunities to enhance research related to substance use among American Indian youth.

Together, the indigenist stress coping paradigm and historical trauma theory afford additional opportunities to re-conceptualize American Indian youth alcohol and marijuana use (and victimization) such that more culturally responsive and reflective models for understanding are developed. Both emphasize a framework that highlights collectivity and connectedness at all levels, a balance of downstream and upstream considerations. Through the integration of “indigenist” stress coping paradigm and historical trauma theory, this study uses these frameworks for understanding practitioner perceptions of alcohol and marijuana use and victimization across family and community systems as they impact the youth they serve.

## CHAPTER 4. METHODOLOGY

### Study Design

Although the literature is plentiful concerning non-Native youth victimization and substance use, studies concerning American Indian youth victimization and alcohol and marijuana use is lacking. The purpose of this dissertation study is to explore the association between victimization and alcohol and marijuana use among American Indian youth living on or near reservations. An exploratory sequential quantitative priorities mixed methods model with a qualitative follow-up (QUANT → *qual*) was selected for this exploration. Specifically, this design allows for quantitative data to be collected and analyzed in the first phase, while qualitative data are collected and analyzed in the second phase to bring voice to and shed light on the first phase findings (Creswell, 2008; Morgan, 2014). An exploration component with this design acknowledges that little is known or is poorly known about the phenomena and/or population (Morgan, 2014).

When used together the methods compliment the strengths and weaknesses of the other and offers the researcher the opportunity to assess data convergence and divergence (Morgan, 2014). However, the main reason for the selection of a mixed methods design is to openly acknowledge that American Indian communities, despite some universal practices, are diverse historically, socially, and culturally. Reliance solely on quantitative methods, even when these measures are culturally valid, reliable, and relevant, may place limits on what can be learned concerning the dynamics and nuances of victimization and alcohol and marijuana use as experienced in a particular tribal community. On the other

hand, strict reliance on qualitative methods limits the ability to generalize beyond the study given how important the topic is, though generalizing findings across groups of American Indian populations is often strongly cautioned against (Gone & Alcantara, 2007).

### Research Questions and Hypotheses

The first phase of the study consisted of a secondary data analysis using a publicly available data set, with the second phase of the study comprised of an online qualitative survey and optional in-person interview and qualitative data analysis. The research questions and hypotheses guiding each phase are provided below.

#### Phase I: Quantitative Research Questions

1. Does victimization predict alcohol and marijuana user levels among youth in the study?
2. Are there differences in effect sizes between victimization and alcohol and marijuana user levels as a function of gender?

#### Phase I: Hypotheses

1. Victimization will be positively associated with heavy alcohol and marijuana user levels when the models are run with the sample intact.
2. Differences in effect sizes between victimization and alcohol and marijuana user levels will be found when the models are ran separately by gender and compared side-by-side (due to the exploratory nature of the study, no relationship was hypothesized).

## Phase II: Qualitative Research Questions

1. How do practitioners serving American Indian youth living on or near reservations perceive victimization influencing the youth's use of alcohol and/or marijuana?
2. How and to what extent does family influence support and promote alcohol and/or marijuana use abstinence?
3. How and to what extent does involvement in community activities and/or events support and promote alcohol and/or marijuana use abstinence

## Phase III: Mixed Methods Questions

1. What results emerge when comparing the outcome of quantitative data about American Indian youth victimization and alcohol and marijuana user levels, anticipatory socialization, and family influence with exploratory qualitative data about practitioner perceptions on American Indian youth victimization, alcohol and marijuana use, and family influence?
2. Based on the analysis of mixed methods data, how can non-Native social workers better situate themselves to honor the contextual realities of American Indian youth, their families, and communities?
3. Based on the analysis of these data, what are the implications for future social work practice, policy, and research?

## Study Processes and Limitations

### Phase I

For the past six years, this non-Native researcher has worked closely with a tribal community partner in the Pacific Northwest to develop and evaluate their maternal child health program. Investment in tribal maternal child health programming has served two important purposes as envisioned by the community partner, both concerning child abuse and neglect and substance use. Tribal and other community health and wellness leaders have wondered if intervening and interrupting current instances of child abuse and neglect through the delivery of a culturally infused maternal child health program will prevent future child maltreatment and decrease substance use among their young people.

To learn more about this relationship among American Indian youth, this researcher spent her doctoral program studying this substantive topic. During her literature review, this researcher noticed that most inquiry relied on retrospective accounts focused primarily on American Indian adult women living on or near reservations. Additionally, this literature was heavily siloed in the bodies of substance use, mental health, and child maltreatment. A subsequent review of the victimization literature showed relationships between victimization, substance use, suicidal thought and behavior, and emotional health challenges. However, much of the literature focused primarily on non-Native populations, frameworks, and perspectives. American Indian people have yet to be meaningfully considered. This researcher reported back what she had found to her community partner and inquired about next steps. To test these relationships, this researcher took advantage of a summer advanced research methods course to locate and work with an appropriate publicly available data set.

Even though the data for the core quantitative study were drawn from a nationally representative sample consisting solely of self-identified American Indian youth living on or near reservations, there are limitations worth mentioning. Because of unique cultural and linguistic practices across tribal communities, generalizability of findings is limited, particularly when important historical and social contexts are absent (O'Neill & Mitchell, 1996). The selected research process and design, however, may help to establish a future framework for continued exploration of victimization experience and alcohol and marijuana use in other tribal communities. Another limitation to this study included the cross-sectional analysis of the data set. A cross-sectional analysis makes it difficult to determine or infer causal relationships between independent and dependent variables, even when known risk and protective factors are controlled. Lastly, the data from the original study were collected during school hours in a school setting, and since the method of data collection was survey, student self-report was greatly relied on. It is possible that youth answered in a manner considered socially desirable such that discrepancies between actual and reported alcohol and marijuana user levels and victimization experience were present.

## Phase II

Upon completion of the core quantitative phase, this researcher reported findings to her community partner. It was also at this time that a mixed methods course on campus came to this researcher's attention and it was determined that she would take advantage of the course to develop ideas about the creation of a mixed methods study. The main purpose for utilizing this methodology was to extend the findings from the quantitative

phase into a qualitative follow-up, specifically to speak with practitioners serving American Indian youth on or near the reservation who have been victimized and who have or are using alcohol and/or marijuana. Not including youth in phase two was deliberate. Phase two was originally proposed as focus groups with American Indian youth in the tribal community; but when the co-facilitator (who is an enrolled tribal member and experienced with conducting research and evaluation in their community) was no longer available to assist, it was determined after discussions with the local practitioner experts that practitioners would serve as study participants. Practitioners were viewed as qualified due to their direct and long-term interactions and relationships with youth within the tribal community, and because their voices are seldom heard despite how closely they work with youth in tribal contexts. And while these may be a limitations, this researcher and her community partner are aware that the phase two qualitative follow-up has the potential to provide additional information and a deeper understanding of the important cultural, social, and historical influences that may likewise assist to explain victimization as a risk for alcohol and/or marijuana use, and to further uncover the benefits of community factors that encourage abstinence.

Sample size and transferability are two limitations identified for the second phase. First, as with most qualitative research, the sample size is small and may not reflect the perceptions of all practitioners in reservation-based tribal communities. And since the second phase was confined to one reservation-based tribal community and due to cultural variation and heterogeneity among reservation-based tribal communities, transferability, and applicability of the findings to other reservation-based American Indian youth or



practitioners would be difficult and even inappropriate (Okamoto et al., 2001; Waller et al., 2003). For some, however, the limitations present as strengths. According to Straits et al., (2012) in *Guiding Principles for Engaging Research with Native American Communities*, sustainable research concerning Native American people is context-driven and starts small, respects and honors tribal sovereignty and timeframes, is authentic and around for the long-term, and is infused with cultural humility and integrity on part of the non-Native researcher.

## CHAPTER 5. QUANTITATIVE PHASE I

### Study Data

Secondary data for the first phase of this mixed methods study were obtained from the Resource Center for Minority Data (RCMD). RCMD is made available through the Interuniversity Consortium for Political and Social Research (ICPSR), a publicly available database that provides rich data resources. Prior to gaining access to raw data on the ICPSR, users are asked to review a responsible use statement that addresses the following: (a) that the confidentiality of study participants will be protected in all ways; (b) that the data sets will only be used for statistical analysis and reporting aggregate information; (c) breaches in study participant confidentiality will be reported to the ICPSR immediately; (d) data available through the ICPSR are not to be distributed or sold without the written permission of ICPSR; and (e) the user will inform the ICPSR of data that are used in books, articles, or in other publications (ICPSR, n.d.).

In the “find and analyze data” search box on the ICPSR website the following criteria were entered: “American Indian adolescent substance use.” Of the studies populated and reviewed, the Drug Use among Young Indians: Epidemiology and Prediction study (Beauvais & Swaim, 2013) met the research agenda. Review of the Codebook.pdf, Questionnaire.pdf, scales and their alphas created by the principal investigators, and data set files were conducted in the final determination. These data were collected as part of an on-going surveillance of levels and patterns of substance use among American Indian youth living on or near reservations for the purposes of learning

about and accurately describing the epidemiology and etiology of substance use during the following time periods: 1993-2000 (Wave I), 2001-2006 (Wave II), and 2009-2013 (Wave III) (Beauvais & Swaim, 2013).

The sampling frame consisted of schools with at least 20 percent of American Indian students living on or near reservations that were then stratified by region. The sampling scheme is a modified version of and is based on the seven geographic regions (Northeast, Northwest, Northern Plains, Southeast, Southwest, and Southern Great Plains) described by Snipp (2005) where American Indians reside in the United States (Beauvais & Swaim, 2013). Recruitment in each region was based on the approximate percentage of American Indians living in each respective region. The data included 26,451 students in grades 7 to 12, who were between the ages of 12-18 years old, and had a racial demographic comprising American Indian, White, Black, Latino or Hispanic, Alaska Native, Hawaiian or Pacific Islander, Asian American, or other. Student observations were independent between waves of data collection such that if a student had previously participated in the study, they were precluded from participating further and were dropped. Data that underwent a secondary analysis included data from Waves II (2001-2006) and III (2009-2013) of the original study.

The data collected for this study from the Drug Use among Young Indians: Epidemiology and Prediction study were of youth who identified solely as American Indian. Data were then further narrowed to ages 12-18 years old and for grades 7-12. Victimization, anger, depression, anticipatory socialization alcohol/marijuana, family sanctions against substance use, family communication about the dangers of substance

use, and American Indian identity data were selected for the participants. A working file was created as a reference with all data including descriptive information. Data underwent further inspection to examine missing values. Missing values were designated and imputed as a coded variable by the ICPSR 2015. It is important for the researcher to determine how missing values will be dealt with and to carefully consider how decisions will impact the analysis (Pallant, 2010). Missing values were excluded using cases pairwise. Excluding cases pairwise allows for cases that have the necessary information be retained while cases with missing data are excluded, if they do not have the required information for the selected analysis (Pallant, 2010). All data were then recoded and readied for analysis using linear regression. Linear regression as the analytic approach was the best selection since the independent variables were a composition of dichotomous and continuous variables and the dependent variables were continuous (Pallant, 2010).

#### Instrumentation: American Drug and Alcohol Survey (ADAS)

To answer the research questions in the original study, the principal investigators (Beauvais & Swaim, 2013) validated an instrument for measuring substance use in middle and high school students called the American Drug and Alcohol Survey (ADAS). The ADAS is a multi-item scale that gathers categorical data on different variables related to substance use. Broken down into life or problem areas, the ADAS assesses individual factors regarding substance use frequency, attitudes and experiences of drug use, attitudes and experiences of school, perceptions of self, influences and interactions of family and peers, delinquency, victimization, activities, and cultural tradition and

identity. In a validation study comparing the percentage of lifetime prevalence of drug use of the ADAS to the Senior Survey and the National Adolescent Student Health Survey, Oetting & Beauvais (1990) found the measure comparable. The ADAS consists of several response options that include yes/no, 4 or 5 point categorical scales, and categorized numbers to show frequency (Beavauis & Swaim, 2013). Over the years, the ADAS has been has been refined and validated for use with American Indian, non-Native, and other ethnic populations (Oetting & Beauvais, 1990).

### Data Analysis

The researcher conducted a variety of statistical procedures using IBM Statistical Package for Social Sciences (SPSS). Preliminary analysis consisted of an assessment of the descriptive statistics to determine if the data were normally distributed, a bivariate analysis to assess the relationships among the independent variables using Pearson correlation test, and a reliability analysis to assess the reliability of the selected scale items among the sample in the first phase of the mixed methods study. Distribution-related concerns were not detected, and the reliability analysis showed all scale items to have alphas ranging from .86 to .95, indicating excellent internal consistency (Field, 2009). Two models were developed based on the dependent variables (alcohol user level vs marijuana user level) (Dieterich, Stanley, Swaim, & Beauvais, 2013) and analyzed a total of three times each utilizing ordinary least squares (OLS) regression: once with the youth combined, second with female youth only, and third with male youth only. Finally, to assess the magnitude of effect for each group and to investigate differences in

associations between the key independent and dependent variables, each model was analyzed separately by gender and the findings compared side-by-side.

### Study Variables

Both the “Indigenist” Stress Coping Paradigm and Historical Trauma Theory (Brave Heart, 1998; Brave Heart, 1999; Brave Heart, 2008; Evans-Campbell, 2008) have guided this study in the selection of independent variables that were grouped together as risk and protective factors (Walters, Simoni, & Evans-Campbell, 2002) that may contribute to the dependent variables. This study seeks a measurable contribution between victimization experience and alcohol and marijuana user levels among American Indian youth living on or near reservations. Participant demographic characteristics served as an additional descriptor for this selected population of youth. The data were exported into SPSS for reorganization, recoding, and analysis utilizing OLS regression.

Risk factors included victimization, age, anger, depression, and anticipatory socialization. Protective factors included family influence and American Indian identity. Victimization was the key independent variable and was defined for this study as whether youth had experienced victimization. All the independent variables were examined through the lenses of the “indigenst” stress-coping paradigm and historical trauma theory. Each of these variables are considered important when examining participant alcohol and marijuana user levels.

To address the first research question, the predictor variable victimization was constructed using six items asking about the frequency with which youth had been

victimized. Respondents were asked to indicate how many times they had ever been “beaten up by someone your age,” “beaten up by someone else,” “scared with a knife, club, chain, or gun,” “hurt with a knife, club, chain, or gun,” “sexually assaulted,” and “robbed.” Response options included 1 = *Never*, 2 = *1-2 times*, 3 = *3-5 times*, and 4 = *6 or more times*. These items were totaled (the cutoff defined as victimization experiences greater than 1), dichotomized, and re-coded to include 0 = *Never*, 1 = *Yes*.

Included in the Codebook was a document developed by the original investigators to describe the computation of scales they had created and used for previous publications so to share these scales with interested researchers (Inter-university Consortium for Political & Social Research, n.d.). None of the variables were reverse coded. For both the selected risk and protective factors, the researcher elected to utilize the already developed scales and coded them in the reverse. Of the risk factors, anger is represented in the data as a composite comprised of the summed score of the six items. Respondents were asked to self-assess their anger on a four-point Likert-type scale with responses ranging from 1 = *A lot* to 4 = *No* utilizing statements including “I am quick tempered,” “I get mad,” “I feel like hitting someone,” “I lose my temper,” “I am hotheaded,” and “I get angry.” These items were reverse coded to 1 = *No* to 4 = *A lot* such that high scores indicated a high level of anger.

Depression is represented in the data as a composite comprised of the summed score of the seven items. Respondents were asked to self-assess their depression on a four-point Likert-type scale with responses ranging from 1 = *A lot* to 4 = *No* utilizing statements including “I feel low,” “I am unhappy,” “I am lonely,” “I feel bad,” “I feel

sad,” “I am lonesome,” and “I am depressed.” These items were reverse coded to *1 = No* to *4 = A lot* such that high depression scores indicated a high level of depression.

Anticipatory socialization for both alcohol and marijuana are represented in the data as separate composite variables comprised of the summed score of four selected items. Respondents were asked to report their level of agreement about the role they perceived alcohol played in their peer relationships. A five-point Likert-type scale with responses ranging from *1 = Strongly agree* to *5 = Strongly disagree* was utilized to solicit responses to statements including “drinking with friends is part of being with a group,” “students at my age are expected to drink alcohol,” “drinking alcohol is an important part of being with friends,” and “drinking alcohol allows students to make friends.” These items were reverse coded to *1 = Strongly disagree* to *5 = Strongly agree* such a higher anticipatory socialization score indicated strong agreement. The same four items were selected but tailored for marijuana use. Respondents were asked to report their level of agreement about the role they perceived marijuana played in their peer relationships. Statements including “smoking marijuana with friends is part of being with a group,” “students at my age are expected to smoke marijuana,” “smoking marijuana is an important part of being with friends,” and “smoking marijuana allows students to make friends” were utilized to solicit response. These items were reverse coded from *1 = Strongly agree* to *5 = Strongly disagree* to *1 = Strongly disagree* to *5 = Strongly agree* such that a higher anticipatory socialization score indicated high agreement.

Of the protective factors, family influence is represented in the study as family sanctions against substance use and family communication about substance use. The



family sanctions against substance use variable in the data is represented as a composite variable comprised of the summed score of the 12 items. Respondents were asked to indicate “How much their family would care if” they used alcohol and other substances and “How much they would try and stop you” from using on a 12-point Likert-type scale. Responses ranged from 1 = *A lot* to 4 = *Not at all*. These items were reverse coded to 1 = *Not at all* to 4 = *A lot* such that that high scores indicated high family sanctions against substance use. Family communication about substance use was measured utilizing six selected items. Family communication about substance use is represented in the data as a composite variable comprised of the summed score of the six items. Respondents were asked to indicate whether their family had talked to them about the dangers of alcohol and other substance use on a six-point Likert-type scale. Responses ranged from 1 = *A lot* to 4 = *Not at all*. These items were reverse coded to 1 = *Not at all* to 4 = *A lot* such that that high scores indicated higher family communication about the dangers of substance use.

American Indian identity is represented in the data as a composite variable comprised of the summed score of six selected items. Respondents were asked to indicate how much they identified with American Indian culture and tradition, to indicate their intention to carry American Indian culture and tradition into adulthood, and to evaluate their and their family’s success in American Indian culture. A four-point Likert-type scale was utilized with response options that included 1 = *A lot* to 4 = *No*. These items were reverse coded to 1 = *No* to 4 = *A lot* such that a high score indicated strong American Indian identity.

The dependent variables alcohol user level and marijuana user level were separately measured with one selected item for each substance. Respondents were asked to self-assess their level of alcohol and marijuana use with the statements “In using alcohol, you are a...?” and “In using marijuana, you are a...?” Response options included and were coded the same: *1 = Non user to 6 = Very heavy user*. Both alcohol and marijuana user levels are represented in the data as continuous variables. Creation of a continuous level of measure allowed this study to assess the variability of alcohol and marijuana user levels among the participants.

To address the second research question, the models were analyzed one time with the sample intact, a second time with female youth only, and a third time with male youth only.

## Results

### Preliminary Study Findings

Participants in the study were a nationally representative sample of self-identified American Indian youths (N=12,634) consisting of 6,232 male (49%) and 6,402 female (51%) youth. Participants’ ages ranged between 12 and 18 years old. The mean age for youth was 14.80 years (*SD* = 1.65). The mean age for female youth was 14.77 years old (*SD* = 1.66) and 14.82 years old (*SD* = 1.65) for the male youth. Participating youth were in grades 7-12 at schools on or near their reservation at the time of data collection. Self-assessed alcohol and marijuana use was low for participants, as most of the youth assessed their alcohol and marijuana use as less than 3, indicating they were light users.

Victimization was high among study participants with about half of the youth (48%) reporting an experience. When assessed separately by gender, fifty-two percent of male youth reported an experience of victimization.

To further examine differences by gender in alcohol and marijuana user levels, independent and paired samples *t*-tests were conducted. Independent samples *t*-test are employed when the researcher wants to compare means scores for two different groups of individuals (Pallant, 2010). The independent samples *t*-test revealed there was no difference in alcohol user level scores for male youth and female youth,  $t(12303.27) = -.842, p = .400$ . The second independent samples *t*-test comparing marijuana user scores for male and female youth revealed that male youth scored higher on marijuana user levels than female youth,  $t(12363.06) = 3.52, p = .001$ .

Paired samples statistics are utilized when the researcher wants to compare the mean values of a set of scores to learn if there is a difference (Pallant, 2010). On average, male youth had higher self-assessed marijuana user levels than alcohol user levels,  $t(6092) = -2.63, p < .001$ . The mean increase in marijuana user levels was .16 with a 95% confidence interval ranging from -.201 to -.131 (Pallant, 2010). Like the male youth, on average, female youth had higher self-assessed marijuana user levels than alcohol user levels,  $t(6304) = -2.63, p < .05$ . The mean increase in marijuana user level was .04 with a 95% confidence interval ranging from .07 to .01 (Pallant, 2010).

Bivariate analysis of all variables (see Table 2) revealed that age was significantly associated with anticipatory socialization – alcohol, but with a very small effect size

( $r = .08, p < .01$ ). Age was associated with no other variables in the study. As expected, most of the other variables were somewhat associated with each other but with relatively small effect sizes. Large effect sizes were found between anticipatory socialization – alcohol and anticipatory socialization – marijuana ( $r = .80, p < .01$ ) and between anger and depression ( $r = .55, p < .01$ ). The factors anticipatory socialization – alcohol and anticipatory socialization – marijuana was employed in separate analysis respective of the dependent variables (Pallent, 2010).

Table 1

*Descriptive Statistics for Study Variables*

	Sample Intact <i>Mean (SD)</i>	Female Youth <i>Mean (SD)</i>	Male Youth <i>Mean (SD)</i>
	2.20 (1.34)	2.21 (1.29)	2.19 (1.40)
	2.30 (1.62)	2.25 (1.54)	2.35 (1.69)
<i>Independent variable</i>			
Victimization experience: Yes = 1 Never = 0	.48	.46	.52
<i>Control variables</i>			
Age	14.80 (1.65)	14.77 (1.66)	14.82 (1.65)
Gender: Female = 1; Male = 0	.48	-	-
Anticipatory socialization–Alcohol	8.77 (4.04)	8.68 (3.88)	8.85 (4.18)
Anticipatory socialization–Marijuana	9.22 (4.65)	8.88 (4.40)	9.59 (4.88)
Emotional characteristics–Anger	13.76 (4.83)	13.99 (4.86)	13.52 (4.79)
Emotional characteristics–Depression	12.70 (5.63)	13.26 (5.83)	12.08 (5.33)
Family influence–Family sanctions against sub use	43.57 (8.03)	44.38 (6.90)	42.79 (8.91)
Family influence–Family comm. about sub use	18.74 (5.84)	18.76 (5.75)	18.76 (5.92)
American Indian identity	18.84 (5.07)	19.06 (4.91)	18.62 (5.22)

Table 2

*Correlations among Study Variables*

		1	2	3	4	5	6	7	8	9	10
1	Age	-	-.01	.08***	.03	-.12	-.03	-.01	-.01	-.01	-.03
2	Gender		-	-.02	-.08**	.10**	.00	.04**	.05**	.10**	-.05**
3	Ant Social–Alcohol			-	.80**	-.12**	-.12**	.02	.24**	.20**	.15**
4	Ant Social–Marijuana				-	-.16**	-.12**	.42*	.23**	.18**	.18**
5	Sanctions against substance use					-	-.36**	.16**	.00	-.06**	-.05**
6	Comm about sub use						-	.16**	-.02	-.09**	-.07**
7	American Indian identity							-	-.01	.01	.06**
8	Anger								-	.55**	.26**
9	Depression									-	.22**
10	Victimization										-

Note. \*\*:  $p < .01$  (1-tailed); \*:  $p < .05$  (1-tailed); Ant Socialization = Anticipatory Socialization

## Model 1: Alcohol User Levels

When controlling all other variables, victimization was a statistically significant contributor to heavier alcohol user levels for youth ( $\beta = .13, p < .001$ ). Table 3 shows the linear regression estimates for the sample intact. Concerning when the regression model was run by gender, victimization was a slightly stronger contribution to alcohol user levels among female youth ( $\beta = .15, p < .001$ ) when compared to male youth ( $\beta = .12, p < .001$ ). Table 4 shows the linear regression estimates by male and female youth separately.

Analysis of the control variables revealed important additional findings. Youth who perceived alcohol playing a role in the development or maintenance of their peer relationships were heavier users of alcohol ( $\beta = .27, p < .001$ ). When assessed by gender, this effect was much stronger for male youth ( $\beta = .32, p < .001$ ) than female youth ( $\beta = .24, p < .001$ ). Age contributed significantly to alcohol user levels ( $\beta = .17, p < .001$ ), indicating older youth were heavier users of alcohol. The effect for older male youth was

slightly stronger ( $\beta = .19, p < .001$ ) than for female youth ( $\beta = .16, p < .001$ ) when compared.

Anger was a significant contributor to heavier alcohol user levels ( $\beta = .18, p < .001$ ). When the regression models were compared, assessment found this effect to be much stronger for female youth ( $\beta = .21, p < .001$ ) than the male youth ( $\beta = .15, p < .001$ ). Depression contributed a significant reduction in alcohol user levels for youth ( $\beta = -.05, p < .05$ ), but only just so. An assessment of the regression models by gender revealed this effect was present only for male youth ( $\beta = -.09, p < .01$ ). No significant effect was found for female youth.

Family influence was a protective factor for youth at each level of investigation. Family sanctions against substance use reduced alcohol user levels for youth ( $\beta = -.09, p < .01$ ). When assessed by gender, this effect was much stronger for male youth ( $\beta = -.14, p < .01$ ) than for female youth ( $\beta = -.06, p < .01$ ). Family communication about the dangers of substance use contributed significantly to reduced alcohol user levels ( $\beta = -.04, p < .05$ ). This effect was present only for female youth ( $\beta = -.05, p < .01$ ). No significant effect was found for male youth.

Table 3

*Regression Estimates for Alcohol User Levels by Youth Combined*

	Youth Combined		
	<i>B</i>	<i>B SE</i>	$\beta$
Age	.14	.01	.17***
Gender	.07	.04	.02
Victimization experience ( <i>ref</i> : Never)	.35	.05	.13***
Anticipatory socialization–Alcohol	.09	.01	.27***
Emotional characteristics–Anger	.05	.01	.18***
Emotional characteristics–Depression	-.01	.01	-.05*
Family influence–Family Sanctions	-.01	.01	-.09***
Family influence–Family Comm.	-.01	.01	-.04*
American Indian identity	.01	.01	.02
<i>R</i> <sup>2</sup>	.22		
<i>F</i>	78.64***		

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$

Table 4

*Regression Estimates for Alcohol User Levels by Youth Separate*

	Female Youth			Male Youth		
	<i>B</i>	<i>B SE</i>	$\beta$	<i>B</i>	<i>B SE</i>	$\beta$
Age	.12	.02	.16***	.16	.02	.19***
Gender	-	-	-	-	-	-
Victimization experience ( <i>ref</i> : Never)	.39	.07	.15***	.34	.07	.12***
Anticipatory socialization–Alcohol	.08	.01	.24***	.11	.01	.32***
Emotional characteristics–Anger	.06	.01	.21***	.04	.01	.15***
Emotional characteristics–Depression	-.01	.01	-.03	-.02	.01	-.09**
Family influence–Family Sanctions	-.01	.01	-.06*	-.02	.00	-.14***
Family influence–Family Comm.	-.01	.01	-.05*	-.01	.01	-.03
American Indian identity	.01	.01	.03	.01	.01	.02
<i>R</i> <sup>2</sup>	.22			.24		
<i>F</i>	41.42***			47.19***		

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$

## Model 2: Marijuana User Levels

When controlling for all other variables, victimization was a statistically significant contributor to marijuana user levels for youth in the study ( $\beta = .15, p < .001$ ).

Table 5 presents the linear regression estimates for the sample intact. When the

regression models were compared by gender, the effect was slightly stronger for male youth ( $\beta = .16, p < .001$ ) than for female youth ( $\beta = .15, p < .001$ ). Table 6 shows the regression estimates by male and female youth separately.

Analysis of the control variables revealed important additional findings. Youth who perceived marijuana playing a role in their peer relationships were heavier marijuana users ( $\beta = .37, p < .001$ ). This effect was much stronger for male youth ( $\beta = .44, p < .001$ ) than for female youth ( $\beta = .31, p < .001$ ) when compared. Age contributed significantly to marijuana user levels ( $\beta = .10, p < .001$ ), indicating older youth were heavier users of marijuana. When assessed by gender, the effects were slightly stronger for male youth ( $\beta = .11, p < .001$ ) than for female youth ( $\beta = .09, p < .001$ ).

Anger was a contributor to heavier marijuana user levels for youth ( $\beta = .10, p < .001$ ). When assessed by gender, this effect was much stronger for female youth ( $\beta = .14, p < .001$ ) than for male youth ( $\beta = .08, p < .01$ ). Family sanctions against substance use contributed to a reduction in marijuana use ( $\beta = -.12, p < .001$ ). Assessment by gender revealed this effect was much stronger for male youth ( $\beta = -.15, p < .001$ ) than for female youth ( $\beta = -.08, p < .01$ ).



Table 5

*Regression Estimates for Marijuana User Levels by Youth Combined*

	Youth Combined		
	<i>B</i>	<i>B SE</i>	$\beta$
Age	.09	.01	.10***
Gender	.04	.05	.01
Victimization experience ( <i>ref</i> : Never)	.50	.05	.15***
Anticipatory socialization–Marijuana	.13	.01	.37***
Emotional characteristics–Anger	.03	.01	.10***
Emotional characteristics–Depression	-.01	.01	-.03
Family influence–Family Sanctions	-.02	.01	-.12***
Family influence–Family Comm.	-.01	.01	-.02
American Indian identity	.01	.01	.05**
<i>R</i> <sup>2</sup>	.26		
<i>F</i>	97.72***		

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$

Table 6

*Regression Estimates for Marijuana User Levels by Youth Separate*

	Female Youth			Male Youth		
	<i>B</i>	<i>B SE</i>	$\beta$	<i>B</i>	<i>B SE</i>	$\beta$
Age	.08	.02	.09***	.11	.03	.11***
Gender	-	-	-	-	-	-
Victimization experience ( <i>ref</i> : Never)	.45	.08	.15***	.55	.09	.16***
Anticipatory socialization–Marijuana	.11	.01	.31***	.15	.01	.44***
Emotional characteristics–Anger	.05	.01	.14***	.03	.01	.08**
Emotional characteristics–Depression	-.00	.01	-.01	-.02	.01	-.06*
Family influence–Family sanctions	-.02	.01	-.08**	-.03	.01	-.15***
Family influence–Family Comm.	-.01	.01	-.04	.00	.01	.01
American Indian identity	.02	.01	.08**	.01	.01	.02
<i>R</i> <sup>2</sup>	.22			.31		
<i>F</i>	42.18***			65.41***		

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$

## Discussion

While alcohol and marijuana use have been studied extensively in tribal communities (Beauvis & Swaim, 2013; Cheadle & Hartshorn, 2012; Friese & Grube, 2008), this is the first study to consider the association between victimization and alcohol and marijuana user levels among a nationally representative sample of American Indian

youth living on or near reservations. Contributions of gender to American Indian youth alcohol or marijuana use continues to elude researchers (O'Neil & Mitchell, 1996; Walls & Whitbeck, 2011), so one of the research goals was to locate a creative alternative to assess the data. This study was the first to assess effect size when regression models are run separately by gender.

The purpose of this study was to test whether victimization was associated with alcohol and marijuana user levels. Utilization of self-assessed user levels as a dependent variable was to expand on findings from the literature describing whether victimized youth are using substances (Luk et al., 2010; Tharp-Taylor et al., 2009). Results from this study indicated that victimization was strongly associated to heavier user levels for both alcohol and marijuana when the regression models were run with the sample intact. These findings are consonant with linkages between victimization and substance use for non-Native youth and for American Indian adults (Duran et al., 2004; Fenton et al., 2013; Libby et al., 2004; Shin, Edwards, & Heeren, 2009; Tharp-Taylor, Haviland, & D'Amico, 2009). Recent findings by Bell and colleagues (2014) indicate that bullying contributed to substance use for a group of Lumbee youth from South Carolina. Findings from this study provide additional evidence of the relationship between victimization and substance use and support ongoing investigations to develop a better understanding of these linkages for reservation-based American Indian youth (Beauvais et al., 2004; Friese & Grube, 2008; King et al., 2014; Swaim et al., 1993).

This study hypothesized differences in effect size would be found when the regression models were run separately by gender. Findings indicated that for both male

and female youth victimization was a strong contributor to heavier alcohol user levels, with the effect stronger for female youth. When the regression models were run separately for marijuana user levels, victimization was strongly associated with heavier marijuana use for both male and female youth, with little difference between the two groups. These findings suggest that victimized female youth are using heavier levels of alcohol and that victimized male and female youth are using marijuana similarly. Focus should be spent parsing out types of victimization to learn which have the greatest impact in future research.

Findings from the control variables are noteworthy and worth mentioning. Of all the control variables, anticipatory socialization for both alcohol and marijuana was the strongest contributors to alcohol and marijuana user levels. This result was also found when the models were compared by gender, with the strongest effect present for male youth in the study. Peer relationships at this age are important such that youth frequently rely on alcohol and/or marijuana to facilitate acceptance and approval or for the establishment of new peer networks (Martinez et al., 2015). Findings from this study suggest that the effects may be particularly harmful for youth since they are engaging with alcohol and/or marijuana at substantial levels. Incorporating peer pressure, romantic relationships, culturally derived and defined gender socialization and expectations, and substance use norms in future studies may help to explain how and why substances may be important in American Indian youth relationships (O'Neil & Mitchell, 1996; Walls & Whitbeck, 2011).

This study found family sanctions against substance use reduced alcohol and marijuana user levels for youth. Previous research with American Indian youths found that youths whose families placed sanctions on substance use were more likely to report no or reduced engagement (Hurdle, et al., 2008; Martinez et al., 2015; Waller et al., 2003). Interestingly, findings from this study were stronger for male youth when the models were compared by gender. Similarly, American Indian youths whose family talk about the dangers of substance use are more likely to report no or reduced engagement (Hurdle, Okamoto, & Miles, 2008; Moon et al., 2014; Waller et al., 2003). Reduction in user levels were found for youth whose families communicated about the danger of substance use in this study, but only for alcohol and only for female youth. While these relationships are unclear, they provide evidence that prevention messaging and programming for American Indian youth should consider gender in substance use education. In addition, future research should learn about social and cultural gender expectations American Indian youth may be exposed to since they likely vary across reservation-based American Indian communities and may encourage them to refrain from using substances as defined by their respective communities (Hurdle et al., 2008; Martinez et al., 2015; O’Neill & Mitchell, 1996). Providing families with successful deterrents and education on the dangers of substance use may also assist to further reduce user levels.

A study by Whitbeck, Hoyt et al. (2001) found perceived discrimination and anger were related to substance use outcomes for a group of reservation-based First Nations and American Indian youth. The results of this study are consistent with the

relationship found between anger and substance use (Whitbeck, Hoyt et al., 2001). Anger for youth in this study contributed to heavier alcohol and marijuana use. This finding was likewise present when the models were compared by gender, an effect found higher for female youth than for male youth. A limitation to the data set is a lack of information that would further elucidate what is contributing to youth anger. Future studies must consider emotional characteristics to strengthen substantive connections with substance use.

This study has several important limitations. First, it was a cross-sectional analysis making it difficult to determine or infer the causal relationships between victimization experience and alcohol and marijuana user levels. Second, data for this study relied solely on self-report during school hours. It is possible that student respondents answered in a manner considered socially desirable such that there may be discrepancies between actual and reported substance user levels and victimization. Third, at the time of the original study, the American Indian youth composing the sample were living on or near a reservation in the United States, so the findings may not generalize to urban American Indian youth or Indigenous youth residing outside of the United States. Finally, even though factors unique to American Indian youth substance use were considered, important contextual information was absent. Future research should more fully consider and operationalize how cultural, social, and historical contexts contribute to the victimization and substance use relationship.

## CHAPTER 6. QUALITATIVE PHASE II

### Participants

Study participants in phase two were practitioners as defined by the community partner (e.g. substance use treatment specialists, mental health therapists, child welfare workers, etc.) who serve American Indian youth living on or near the reservation. Youth between the ages of 10-24 years old comprise approximately 20.3% (548) of the total population (2700) living on or near the reservation. A total of eleven practitioners are working with youth in this tribal community. All practitioners were serving youth who have experience with victimization and were using or had used alcohol or marijuana at the time of the study. Of the eleven surveys distributed, a total of five surveys were completed and returned. No demographic information was collected to ensure the confidentiality of respondents due both to the size of the community and the sensitivity of the topic.

### Data Collection

Data were collected in partnership with a reservation-based tribal community located in the Pacific Northwest. Data collection consisted of an online qualitative survey with an optional in-person interview. Portland State University owned Qualtrics (an online survey platform) was utilized to collect, manage, and monitor incoming project data. An email cover letter along with a common link to the survey was first distributed to three local expert American Indian youth serving practitioners who are known to the researcher via their email addresses. A snowball sampling strategy was used such that

these practitioners were then encouraged to forward the email to other American Indian youth serving practitioners on or near the reservation. Update emails were sent at two week intervals by the researcher to the three original practitioners to alert them to the number of completed surveys. The practitioners in turn sent reminder emails to those they had forwarded the survey to encourage them to lend their voice. A total of six reminder emails were sent over three months while the survey was open.

Open-ended questions in a “storytelling format” (Okamoto et al., 2001; Waller et al., 2003) were utilized to allow for practitioners to talk about their perceptions of youth experiences with victimization, alcohol and/or marijuana use, and factors within the community they believe are most important in supporting alcohol and/or marijuana use abstinence. Questions were organized by foci, including victimization, risk and protective factors, and environment. The opening survey question provided participants with examples of types of victimization before asking them to think about and discuss victimization experience according to the youth they serve, readying them to answer the subsequent questions. Next, participants were asked to think about how they perceived youth victimization experience influencing their (the youth’s) alcohol and/or marijuana use. The following two questions were interested in what participants thought about the influence of friends, family, and community events on supporting youth alcohol and marijuana abstinence, while the remaining questions solicited thoughts about program development and the most important point the participant thought people should know about American Indian youth who have been victimized. In total, the online survey took about 20 minutes to complete.

Practitioners were asked at the start of the survey to provide their email address if they were interested in either speaking more with the researcher about the topic or so she may contact them with further questions. The in-person interview would take from an hour and a half to two hours to complete. I was not surprised when only two of the surveys returned provided an email address, since this was anticipated due to the sensitivity of the topic, how stretched thin practitioners can be, and the small size of the community. Both practitioners who provided their email address were contacted to set up an in-person interview. Only one practitioner replied to express their interest. All practitioners were offered a \$20 incentive payment for their time. The practitioner refused the payment, stating they participated in the study out of passion for the project. We met in a public location selected by the practitioner to discuss further their responses to the survey. This interview was recorded and transcribed verbatim.

### Data Analysis

An inductive thematic analysis strategy was selected to understand practitioner perceptions of youth victimization and its relationships with alcohol and marijuana use. Specifically, I utilized the six-phase method described by Braun and Clarke (2006) to analyze the data from the online qualitative interviews. Due to the exploratory nature of the research questions and the limited information about American Indian youth victimization, an inductive thematic analysis provided an effective strategy for understanding the perceptions of practitioners regarding the phenomena, because it allowed for the data to speak for themselves (Hsieh & Shannon, 2005).



My analysis was concerned with understanding how practitioners perceive and conceptualize victimization among the youth they serve, how youth victimization influences alcohol and marijuana use, who among family and friends are the most important for supporting alcohol and marijuana abstinence, and what community activities and events support alcohol and marijuana abstinence. Additionally, I was interested in learning about practitioner thoughts regarding program development and what they deem to be the most important point about American Indian youth with victimization experience.

Data analysis consisted of six phases. First in a series of phases is data immersion. My first contact with the data was as they were received in Qualtrics. I read each survey upon receipt to familiarize myself with the tone, voice, and flow of the survey. Once data collection concluded, I downloaded the surveys as PDFs, stripped any identifying information (i.e. email address), and notated the interviews as “Interview #1”, “Interview #2” and so on, and read each several times individually to refamiliarize myself. Once the in-person interview was conducted, it was transcribed verbatim. After transcription, I listened to the recording and read along with the transcript to ensure it was an accurate representation of our in-person interview. I then read the transcription and the survey responses several times to begin identifying and highlighting interesting broader patterns of meaning. A small number of surveys and the single interview allowed for a manual coding process.

Categories derived from participant responses drove coding (Braun & Clarke, 2006), the second phase of thematic analysis. Several codes were developed per

participant response to account for as many themes or patterns as possible (Braun & Clarke, 2006, p. 89). For example, as I read each interview, I made note of interesting, significant, or repeated terms above or below the text box containing the response. Additional comments served to summarize participant responses, while others related to ideas that came to mind. This process was used for all the survey and in-person interview data, except I listened to the recording as I made notes on the transcription.

When I was satisfied that the codes were aligned with the research questions, I was ready to begin searching for themes, the third phase of thematic analysis. To prepare, I transposed codes from the interview PDFs to separate sheets of paper. These sheets were organized sequentially by survey question with the codes listed below. To illustrate, I first titled the page with the question number. Next, I noted the participant interview number, indicated the survey question number, and then wrote the codes from the original survey PDF and interview transcript. Lastly, I drew a horizontal line underneath each to differentiate between subsequent codes. Visual organization provided a useful tool for developing and locating themes.

Once the codes were organized, I used large yellow sticky notes to play with potential candidate themes as it allowed for ease of adopting or discarding themes that did not fit by either sticking them to or unsticking them from the page. Sub themes (tracked with small blue sticky notes) were then clustered below the large yellow sticky note. This stage involved an analytical or theoretical ordering whereby I attempted to make sense of the emerging themes and their connections. The initial candidate themes were clustered according to repeated points of concern as reported by participants. I

moved back and forth between the survey responses and the clusters to ensure the themes were an accurate reflection of participant voice. Several preliminary candidate themes emerged from the data. These included intergenerational trauma, situational trauma, unhealthy coping mechanism, helplessness/hopelessness, peer pressure, community acceptance, youth empowerment, and context matters. A benefit to thematic analysis is it allows for themes and their prevalence to be determined according to the researcher (Braun & Clarke, 2006). While the phases described to this point appear linear, thematic analysis is an iterative, discursive process whereby one phase builds upon the other, and in a way that often requires the researcher to return to the data set several times for recoding and a review of themes.

Two steps comprise the fourth phase of thematic analysis. In the first step, I returned to the codes and reviewed them for each survey question individually to see if they fit in a coherent pattern under the assigned candidate theme (Braun & Clarke, 2006). Specifically, I systematically reviewed each question by placing the large yellow sticky note with the candidate theme or themes at the top of the codes page and then by placing the small blue sticky notes containing the subthemes directly underneath. Additional codes were derived for a couple of the survey questions, while two candidate themes for the first survey question were collapsed into one due to repetition in ideas on part of the researcher. Once I was satisfied with the candidate thematic maps, I moved onto step two.

Step two is like the first step except the candidate themes and codes are considered instead within the larger context of the data set (Braun & Clarke, 2006).

While keeping the research questions in mind, I reread the survey data to assess and ensure the candidate themes fit overall. As I read the data, I was prepared to code within themes for items missed during earlier coding stages as this is expected “since coding is an ongoing organic process” (Braun & Clarke, 2006, p. 91). However, after further review, no additional coding was necessary, and I felt confident in the themes and how they went together. I determined the data were ready for phase five of the analysis.

Having satisfied the fourth phase, I returned to the survey responses to perform one more check in preparation for solidifying candidate theme definitions and names. With this check I evaluated each theme to ensure they did not overlap or were too similar (Braun & Clarke, 2006). Also at this time, I pulled key phrases or words I believed best represented candidate themes from the survey responses and renamed them. One final check was performed (as suggested by Braun & Clark, 2006) when I spoke aloud to myself a description of the scope and content of each theme in a couple of sentences to test whether they were clearly defined. Satisfied, I readied the findings, the sixth and final phase of thematic analysis.

### Trustworthiness

Several steps were taken to ensure the trustworthiness of this study. These included prolonged data immersion, reflexive journal keeping, member checking where available, and expert review throughout the study process.

I personally collected all the data, transcribed the only interview, and analyzed all the data. Triangulation of data sources contributed to the trustworthiness and quality of

the study. Two different sources of data were obtained, including an online qualitative survey and in-person interview. One benefit to collecting qualitative survey responses online was the elimination of a transcription phase as participants typed their own answers in to text boxes, thus the potential for transcription error was avoided. Additionally, I spent many hours reviewing the data to ensure my interpretations, themes, and conclusions were grounded in what I was trying to explore to increase the rigor of the study.

I utilized an electronic recording device to share my thoughts and feelings about various aspects of the study process. Recruitment, data collection, analysis, and findings were all topics of discussion in my reflexive journal. I additionally met regularly with my dissertation chair to engage in reflexive dialogue about my thoughts and feelings through the study process, and to strategize when necessary.

Once practitioners completed and returned their surveys, those who had provided an email address were to receive an email invitation for an in-person interview where member checking would take place. Unfortunately, since only two practitioners provided their email address, this made member checking for all returned surveys impossible. Of the two practitioners who did provide their email, only one expressed interest in the in-person interview. During the interview, I provided the practitioner with a copy of their responses, asked if they wanted to change or expand their responses, and shared with them an overview of the responses from the other practitioners. The practitioner chose to elaborate on their responses for two questions. This interview was recorded and

transcribed verbatim. After the analysis, this practitioner was invited via email to review the themes and findings.

Regular checks with local experts occurred over the course of the study. In the two years we have collaborated on this study, we met in person or over email to discuss the topic, candidate participants, and appropriate and feasible methods of qualitative data collection. In fact, at one point last year, we had to re-group when it was discovered that the community partner was unable to assist with data collection as originally proposed. It was determined through conversation that an online qualitative survey would afford participants convenience and anonymity, while relieving the community partner from the burden of data collection and to attend to the distance between myself and the tribal community. Once we received IRB approval and the survey published and disseminated, I sent updates every two weeks to local experts so they were aware of the number of survey responses we had received. These updates also served as a mechanism for the local experts to gently encourage practitioners who had received the survey link to lend their voices if they had not already done so. Once data collection concluded and analysis complete, a draft of the themes and findings were sent to local experts via email for their review, feedback, and confirmation. We also met in person to read, discuss, and affirm the themes and findings.

### Findings

Analysis of participant data yielded seven key themes. Five of these themes are: (a) trauma transmission, (b) make the world go away, (c) you learn to accept...not to

dream, (d) following role models, and (e) safe space. The two additional themes are: (f) (w)holistic uplift and (g) context matters. Findings are presented in depth in three sections below. The first section describes native youth victimization to highlight participant perceptions of its influence on alcohol and marijuana use, while the second section addresses risk and protective factors. Lastly, the third section highlights participant perceptions on program development and the most important point they think people need to know about American Indian youth who have been victimized. Participant voices are included to better illustrate the themes. No corrections were made to grammar or spelling to ensure participant voices remained intact.

### American Indian Youth Victimization

#### Trauma Transmission

Exposure to and the transmission of intergenerational trauma within the youth's family environment was the overriding conceptualization of victimization experience. Nearly all participants referred to "unhealthy lifestyles of parents," "nothing secure," "they move from home to home," "there are no certainties...there are no expectations" as challenges that victimize the youth they serve. One participant stated, "Youth suffer victimization by having to be the adult in their household because there are no guardians to take care of them and/or their younger siblings." Participants expressed concern about the youth's feeling of powerlessness to the situations they find themselves such that they are "voiceless to what's happening around them" and "are then taken advantage of and used by folks that have been victimized." Situations like these also make youth

vulnerable “to use alcohol/drugs as a coping mechanism.” Frustration was expressed by a few participants regarding types of victimization and their relationships to alcohol and marijuana use that, despite being known about, are neither discussed nor addressed. For some participants, challenges were perceived as cyclical whereby unhealthy lifestyles are passed from one generation to the next. “Life is always out of control and they know nothing different...”.

### Make the World Go Away

Another theme that emerged was related to the influence of victimization on alcohol and marijuana use, specifically the use of substances as a coping mechanism. Nearly all participants describe the youth’s use of alcohol and marijuana to hide from their experiences. One participant stated, “I think it [victimization] has a big impact because my victims don’t want to come forward and admit they have been a victim, out of shame. So they have feelings inside and don’t know how to deal with them so they turn to drugs and alcohol to numb the feeling and hide from the world.” Another participant described how alcohol and marijuana are a means to forget the daily experiences from which youth are trying to escape, and sometimes the feeling of being trapped can contribute to a youth’s use of alcohol and marijuana. “I believe that when youth feel like they have no way out but to blend in, so they begin to use alcohol and drugs.” Participants pointed out that youth are learning from the adults in their lives that using alcohol and marijuana are an acceptable method of coping. “Many youth role model the behaviors that they have seen the adults in their life use to handle life situations and unfortunately alcohol/marijuana use serves as a coping mechanism. Youth haven’t



seen any other way to handle life situations and continue the cycle,” one participant shared. Other participants spoke to the contributions of traumatic experience on the norms that develop among families, creating unhealthy cycles of “don’t tell, don’t need, don’t feel.” One participant recommended tapping into the strengths of the community to disrupt and change social norms. “It is a social norm to self medicate with alcohol and “relax” or “let go” when times are tough. It needs to be a social norm that we come together to heal when times are low.”

#### You Learn to Accept...Not to Dream

Reports of feeling helpless or hopeless by youth who had been victimized were received by participants. Several participants stated that youth often feel this way because “many feel that nothing will be done so why report it” or “many of them feel like no one will listen to what they have to say without passing judgement, so they begin to feel like they have no voice.” One participant cautioned against generalizing and instead suggested considering individual responses. They stated, “Because there are youth who would say the use of alcohol/marijuana gives them hope to continue on. Yet some of them would say that using alcohol and/or marijuana makes them feel empowered or gives them strength to not feel helpless and perhaps gives them hope.” It is possible that the perception of relief that alcohol or marijuana provides can create space for the youth to function. Participants also pointed out that not knowing who to talk to or the absence of a support system can exacerbate feelings of helplessness or hopelessness.

#### Risk and Protective Factors

## Following Role Models

The influence of friends and family on encouraging or discouraging alcohol and/or marijuana use was reported by participants as a factor for youth alcohol and marijuana use. Participants described a variety of ways the influence manifests, from role models such as parents and other adults (e.g. coach, mentor) to girl/boyfriends and classmates. Cousins, aunts, and uncles were also described as being important in the lives of youth. One participant explained, “I definitely think that friends and family have the biggest role in the way youth view alcohol & drug use because these are the people the youth trust most in the world and if they see it as a norm when they are young, as they grow it will be a way of life.” Participants reported that youth who are successful, no matter how marginal, report the presence of at least one consistent adult in their lives they can depend on. However, adult’s assumptions about youth needs can sometimes overpower youth participation. One participant noted, “What I have found is adults assume the needs, the wishes, the support network for youth when youth have their own voice of what is needed, what they want, etc. It’s having them use their power to use their voice.” Several participants expressed the importance of friends and cousins in the lives of youth. One participant described the power of peer pressure, “A youth may come from a family that doesn’t use alcohol and/or marijuana but when their guardian isn’t home & their cousins/classmates/friends come over then peer pressure kicks in and then starts the use of alcohol and/or marijuana.”

## Safe Spaces

The presence of strong cultural and educational activities was reported by participants as being critical to youth alcohol and marijuana abstinence. An example of activities includes youth culture night, sons and daughters of tradition, monthly family nights, sobriety pow wows and gatherings, basketball against alcohol and drugs, and summer recreation. Participants described a variety of ways these activities support youth to remain abstinent. One participant explains, “The way these programs support substance use abstinence is by talking about the issues, sharing experiences, addressing unhealthy patterns, addressing ways to develop health coping mechanisms, discussing trauma and its impact, but also allowing youth to be vulnerable to what is happening around them and to process it openly.” Youth do not have to worry about payment, food, or transportation since all are covered by tribal programming, eliminating barriers to participation. Community events offer access to role models with whom youth look up to, and since the events are strictly no alcohol or other drugs “exposure to adults that don’t use socially are perhaps the only exposure they [youth] ever have.” Connecting and talking with other youth and families during the events can also increase feelings of closeness and strengthen community and kinships bonds. Other participants describe the events as spaces where important messaging such as community values are reiterated and reinforced.

### Additional Themes

#### (W)holistic Uplift

Nearly all participants described the importance of including the youth’s family

when conceptualizing and developing programming, emphasizing the point that too often programs focus strictly on the individual. One participant advised, “So much of the victimization is passed down from one generation to the next, let’s approach this head on and meet with families as a whole and begin from there.” Several participants spoke about collaborations between partners to “create the best approach/programming possible.” They stressed the importance of programming that meets the youth where they are, attends to their spiritual, emotional, and physical health, while at the same time encouraging youth empowerment and skill building. Others offered concrete, practical suggestions for connecting with youth such as using humor and being authentic. One participant stated, “Native youth are always laughing and love to joke around, don’t be afraid to be silly and have fun with them. Also, give it time. Some youth will attach to you quickly, others will make it seem impossible, just keep trying.”

#### Context Matters

Understanding context and how it contributes to victimization was the point deemed most important by participants for people to know about. Whether historical, familial, or personal, “all of our Native youth have been victimized in some way.” Another participant stated it differently, “That many youth are a victim of circumstance. That many families are so dysfunctional that they don’t see and/or know what is “normal.” Youth model what they see, and if their family uses alcohol and/or marijuana, there obviously isn’t barriers to getting access to either.” For other participants, it was important for people to know that not everyone has the same response to trauma and to

not pass judgement about anything the youth may have experienced. One participant advocated, “Help them take power over their lives.”

## Discussion

Through the collection of qualitative data with practitioners, several themes emerged as I explored associations according to the study’s three research questions. This study highlights the unique victimization experiences of American Indian youth. Exposure to behaviors that stem from traumatic experience were identified as youth victimization by participants. These behaviors were described as transmitted intergenerationally through familial lines whereby youth learn to cope with and escape from everyday life through alcohol and/or marijuana, a finding that supports the conclusions of Duran, Duran, and Yellow Horse Brave Heart (1998) and Brave Heart (2003).

In addition to highlighting the unique victimization experiences of American Indian youth, the findings also illuminate the thoughts and feelings that may be present for youth who have been victimized. Participants shared that some youth experience shame about being victimized, fear that adults will pass judgment, or simply do not know who to talk to for lack of a support system, often contributing to feelings of helplessness or hopelessness. Feelings that, in turn, can lead to the using of substances to numb oneself to the experience. These results support the findings by Bell et al. (2014) regarding the experiences of bullying among Lumbee youth and Duran et al. (2004) regarding the experiences of American Indian adult women with child abuse histories.

Participants shared likewise that successful youth had at least one consistent adult with whom they (the youth) could trust.

An additional theme supporting the findings of previous research with American Indian youth (Baldwin et al., 2011; Kulis, Okamoto, et al., 2006; Martinez, Ayers, Kulis, & Brown, 2015) was that nearly all of the participants shared that they felt friends and family played significant roles in the lives of the youth they serve, especially when it came to how the youth view alcohol and marijuana and whether they use. Sentiment expressed by participants in this study included the power of both social modeling from adults and peer pressure from cousins, friends, and classmates. Pressure from girl/boyfriends and partners were also mentioned as having an influence. Participants described these influences as sometimes so powerful they can overwhelm efforts by families who sanction against alcohol and marijuana use, such that participants stressed the imperative of developing programming that accounts for all the important people in the lives of youth. Recommendations in the literature frequently focus strictly on the youth despite consideration given to the context with which they reside (for examples see Baldwin et al., 2011; Kulis & Brown, 2011; Gray, 1998). On the other hand, alternatives offered by indigenous scholars and researchers Drs. Joseph Gone (2011, 2013, 2015) and Maria Yellow Horse Brave Heart (1998, 1999), for example, reflect culturally derived substance use and mental health programming that are grounded in pertinent contextual realities. These findings support their efforts.

Events supporting abstinence provide safe spaces where youth can connect with other youth and families, as well as sober adults, to learn about and engage in healthy

methods of coping. Open processing, sharing of experience, and discussions about trauma and its impact on spiritual, physical, and emotional health take place at nearly all events, consistent with the mental health and substance use literature (Bell et al., 2014; Nelson & Tom, 2011). These findings also reflect the primary components of “indignest” stress coping paradigm guiding the study, specifically the connections between traumatic stressors and substance use and the intentional employment of cultural strengths as a strategy to moderate poor health outcomes.

## CHAPTER 7. MIXED METHODS PHASE III

### Data Analysis

After the collection and analysis of qualitative data, I returned to the quantitative findings and compared the results from the two phases. Findings from the ordinary least squares regression were compared to the themes and quotes from the qualitative survey interviews. Specifically, I was interested in analyzing points of convergence and divergence related to the relationships between victimization and alcohol and/or marijuana use, and the influence of family and friends on abstinence.

### Findings

Themes derived from the analysis of qualitative data in phase two provide support for three statistically significant relationships found during phase one quantitative analysis. With both models (alcohol user levels vs marijuana user levels) returning the same three statistically significant relationships, findings are presented for each with an accompanying quote or quotes directly below.

#### 1.1 Association between Victimization & Alcohol & Marijuana Use

*Victimization was significantly associated with heavier alcohol use ( $\beta = .13, p < .001$ )*

*Victimization was significantly associated with heavier marijuana use ( $\beta = .15, p < .001$ )*

Youth who reported a victimization experience also reported using alcohol and/or marijuana at higher levels. Findings from the qualitative study support these findings. In the interviews with practitioners, the connection between victimization and alcohol



and/or marijuana use was discussed and clearly communicated, adding some depth to why youth may be using. One participant stated, “I think it [victimization] has a big impact because my victims don’t want to come forward and admit they have been a victim, out of shame. So they have feelings inside and don’t know who to deal with them so they turn to drugs and alcohol to numb the feeling and hide from the world.” Another participant pointed to the important role that adults play in how youth view alcohol and drugs, “Many youth role model the behaviors that they have seen the adults in their life use to handle life situations and unfortunately alcohol/marijuana use serves as a coping mechanism. Youth haven’t seen any other way to handle life situations and continue the cycle.” These quotes clearly demonstrate the relationship between victimization and alcohol and marijuana use, with the added suggestion that youth are using alcohol and marijuana to cope with their victimization experiences. Recognizing the power and dynamic of social norms to disrupt and create change, one participant advised, “It is a social norm to self medicate with alcohol and “relax” or “let go” when times are tough. It needs to be a social norm that we come together to heal when times are low.”

## 1.2 Association between Anticipatory Socialization & Alcohol & Marijuana Use

*Anticipatory socialization was significantly associated with heavier alcohol use ( $\beta = .27$ ,  $p < .001$ )*

*Anticipatory socialization was significantly associated with heavier marijuana use ( $\beta = .37$ ,  $p < .001$ )*

Youth who perceived alcohol playing a role in the development or maintenance of peer relationships were heavier users of alcohol and/or marijuana. Findings from the

qualitative interviews support these results, with one practitioner discussing this relationship in some detail. They stated, “A youth may come from a family that doesn’t use alcohol and/or marijuana but when their guardian isn’t home & their cousins/classmates/friends come over then peer pressure kicks in and then starts the use of alcohol and/or marijuana. Or peer pressure from a boyfriend/girlfriend telling their partner “if you really love me you’d drink with me or if you don’t smoke some weed with me then you must not care about me.”” This quote demonstrates not only the influence of youth perceptions about the role alcohol and marijuana play in their relationships but how complex and nuanced this association can be.

### 1.3 Association between Family Influence & Alcohol & Marijuana Abstinence

*Family sanctions against substance use was significantly associated with decreased alcohol use ( $\beta = -.09, p < .01$ )*

*Family sanctions against substance use was significantly associated with decreased marijuana use ( $\beta = -.12, p < .001$ )*

*Family communication about the dangers of substance use was associated with decreased alcohol use ( $\beta = -.04, p < .05$ )*

Youths whose family would care if they used alcohol or other drugs and would try and stop them reported decreased alcohol and/or marijuana use. Youths whose family communicated about the dangers of substance use likewise reported decreased alcohol use. This was not found for marijuana use. Results from the second phase diverge slightly in that the participants affirmed the results yet offer an important alternative perspective for youth who may have less support. Practitioner perceptions in the second phase on family influencing youth abstinence focused mostly on the challenges of staying sober.

One participant explained, “I definitely think that friends and family have the biggest role in the way youth view alcohol & drug use because these are the people the youth trust most in the world and if they see it as a norm when they are young, as they grow it will be a way of life.” This statement demonstrates the important roles friends and family members play in the lives of youth and how it may influence their decision to use alcohol and/or marijuana. Participants spoke throughout the survey about family norms and how exposure can set a youth up to engage in what several participants described as “unhealthy lifestyles.” Another participant described unhealthy patterns that exist as “don’t tell, don’t need, don’t feel due to the impact of traumatic experiences, to mask and avoid what is happening.” They went on to say, “When youth are subject to this pattern and it becomes an unhealthy norm, it can continue the cycle of participating in unhealthy norm to abuse substances and other unhealthy coping mechanisms.”

## Discussion

This research in the first phase tested the relationship (when other factors known to contribute to alcohol and marijuana use were controlled) between victimization and alcohol and marijuana user levels to learn whether this association existed for American Indian youth in the study; and if so, to what extent victimization contributed to alcohol and marijuana use. Phase two explored practitioner perceptions on victimization and its influence on alcohol and marijuana use for the youth they serve. By exploring and studying this complex relationship, this researcher developed a preliminary understanding of how non-Native victimization frameworks may be inadequate to explain American Indian alcohol and marijuana use outcomes. For example, non-Native victimization

frameworks typically examine child abuse and neglect or bullying as happening outside the contextual realities with which they occur. Tribal communities frequently do not have this luxury.

Findings in the quantitative phase indicated a significant relationship between victimization experience and heavier levels of alcohol and marijuana use. While qualitative findings did not support the ‘levels’ inquiry of the quantitative phase, participants did confirm the relationship between victimization and alcohol and marijuana use. These results support findings by Fenton et al. (2013), Shin, Edwards, and Heeren (2009), and Tharp-Taylor, Haviland, and D’Amico (2009). A divergence in the findings was because participants in the qualitative phase were not asked about the extent to which the youth they serve are using alcohol and marijuana.

Adolescent substance use researchers posit that youth motivation to engage in alcohol and marijuana is influenced by their family and friends. Findings from the mixed methods analysis supported this theory (Galliher, Evans, & Weiser, 2007; Kulis, Okamoto, Rayle, & Sen, 2006; Martinez et al., 2015; Moon et al., 2014). A significant relationship was found between anticipatory socialization and heavier alcohol and marijuana use. That is, youth who agreed that alcohol (for example) played a role either in the development or maintenance of their peer relationships were heavier users of alcohol. Participants in the qualitative phase spoke at length about the challenges this influence places on youth to stay sober, especially when peer pressure is involved.

Like peer influence is the impact of family on the youth’s use of alcohol and/or

marijuana. Quantitative findings indicated a significant, negative relationship between family communication about and sanctions against substance use and alcohol and marijuana user levels. These findings were consistent with the literature (Hurdle, Okamoto, & Miles, 2003; Moon et al., 2014; Swaim et al., 1993). Participants in the qualitative phase confirmed this relationship and expressed concern about the norms that develop among families, norms they described as “unhealthy” and “cyclical.” Youth exposure to methods of coping that rely heavily on alcohol or marijuana use were the most discussed. Several of the participants shared their thoughts on how difficult it can be for the youth they serve to remain sober when some of them know no other way of dealing with life.

## CHAPTER 8. CONCLUSION

### Implications for Social Work

This mixed methods study holds several implications for social work practice, policy, and research. Social workers have a long history of providing support services to American Indian youth on or near reservations utilizing substance use treatment; and as such, we are uniquely situated to advocate and align with to bolster youth and their communities. The insights from the quantitative study findings in the first phase and practitioners' inputs the second phase shed light on important information that can be used by non-Native substance use specialists, mental health therapists, or child welfare workers. Mixed methods social work research has the power to bring a variety of people together around topics of interest as methodological chains are created one link at a time. Contributions to this chain illuminate new ways of knowing the nuanced relationship between victimization and alcohol and marijuana use.

### Practice

The Self-determination Act of 1974 states that American Indian communities have the “right to develop and implement programs and practices that they feel best meet the needs of their communities” (Lucero, 2011, p. 321). When assumptions or decisions are made without tribal consultation and guidance about what programs or practices are available to American Indian youth in non-Native substance use treatment settings, non-Native social workers undermine tribal sovereignty and self-determination. For non-Native social workers who engage in practice with American Indian youth and are

considering the use of indigenous traditional knowledge and tribal best practices to suffuse practice wisdom, centering tribal sovereignty and self-determination is crucial. This study brings forward the significance of (a) taking steps to re-conceptualize American Indian youth victimization, (b) attending to socio-historical context in substance use treatment, and (c) cultivating youth and family empowerment.

### Re-conceptualizing American Indian Youth Victimization

Phase two results suggest that mainstream victimization as operationalized in the literature is inadequate to describe the experiences of American Indian youth. Practitioners described the youth they serve as being victimized by behaviors stemming from historical and other traumatic experience such that American Indian youth victimization cannot be simply thought of as child abuse and neglect or bullying. Rather, these experiences are in addition to and often compounded by historical, familial, or personal trauma (Evans-Campbell, 2008; Manson et al., 2005). Non-Native social workers can learn many things and be of greater assistance when substance use treatment considers the entire contextual reality of American Indian youth. Employing tribal best practices or incorporating indigenous traditional knowledge when tribal-specific programming is unavailable may prove useful when serving American Indian youth in non-Native treatment settings. However, non-Native clinicians and practitioners are not in a position to determine which tribal best practice, for instance, will be the most useful. Consultation with the youth, their family, and their community is required to ensure an appropriate approach is selected. Tribal liaisons may be useful to assist with creating

meaningful and lasting connections between non-Native organizations and local tribal communities to solidify shared commitments.

### Socio-historical Context in Substance Use Treatment

For decades, Indigenous and non-Indigenous scholars and researchers alike have written extensively in the literature about the need to address the socio-historical impacts of trauma in substance use treatment for American Indian youth (see Deters, Novins, Fickenscher, & Beals, 2006; Evans-Campbell, 2008; Gray, 1998; Manson et al., 2005; Willmon-Haque & Big Foot, 2008). While this study supports author conclusions, questions remain. Is substance use treatment for American Indian youth addressing socio-historical impacts of trauma? How do we know? What does it look like? And if it is, then why do these youths continue to use alcohol and other drugs in excess? To address these questions, practice needs a paradigm shift, one that transforms practitioners in tribal communities into practitioner researchers and evaluators, a shift congruent with social work values of promoting and facilitating research and evaluation (NASW, 1999). Practitioners must be provided the tools necessary to assess and evaluate substance use treatment intervention fidelity and outcomes. This work may require building or expanding on existing research and evaluation capacity, and honoring and valuing different ways of knowing (Gone, 2012). Non-Native social work researchers and evaluators partnered with tribal communities may be useful to stimulate this process. However, we cannot make assumptions about what tools may be missing or useful within the partnering tribal community and must ask how we can be of the best assistance when collaborating on projects. Working under the oversight of an advisory council or other



tribal governing body is useful to ensure work to build research and evaluation capacity meets the needs of the community.

An example of one no or low-cost method is to offer workshops for practitioners in conjunction with other research or evaluation projects already occurring within the partnering community. Facilitation of workshops can be eased when following tribal participatory research (Fisher & Ball, 2003), transformative research and evaluation (Mertens, 2012), or community-based research approaches (Goodkind et al., 2012), since all offer equalized partnerships whereby the community partner is a co-researcher and drives all facets of the research and evaluation. For example, single case design to evaluate tribal maternal health programming has proven to be a useful rigorous alternative to assess program outcomes in tribal contexts (Chromos et al., 2017). Resonating with the beliefs behind this dissertation, single case design plays to the values, mandates, and strengths of tribal communities in that it can accommodate a small sample size, offers visual analysis, and does not require withholding or withdrawing the intervention for the sake of research. Further, comparison groups are not required since participants can act as their own comparison (Kratochwill et al., 2010; Lane & Gast, 2013).

#### Youth and Family Empowerment

Youth and family empowerment and skill building was a strategy suggested by several of the practitioners in phase two of this mixed methods study to augment their social capital and resilience. Within mainstream clinical settings, non-Native social

workers are well positioned to work with colleagues to put these suggestions into action. The creation of cross-discipline collaborations between Native and non-Native practitioners, service providers, and other advocates is one method to guide the improvement of support systems that better serve American Indian youth and their families.

Several practitioners also pointed out that youth often do not have consistent or reliable sober adults in their lives and that thoughts and feelings of helplessness and hopelessness were often exacerbated by the lack of a support system. The inclusion of cultural and educational prevention programming was described as crucial to not only the spiritual, emotional, and physical health and well-being of youth but likewise served as opportunities for youth to be exposed to sober adults and peers. However, the development of programming cannot happen in non-Native clinical settings without consulting the youth, their family, and their community. Learning from tribal partners about what programs may be extended to American Indian youth in non-Native substance use treatment settings is key to honoring tribal sovereignty and self-determination. For instance, mentoring programs are an excellent illustration of human relationships in action for social change (NASW, 1999). This strategy was found to be successful for retaining American Indian students in a post-secondary institution (Shotton, Oosahwe, & Cintròn, 2007). A mentoring program could be developed where sober adult or peer role models from tribal communities volunteer to partner with a single youth or a group of youth to act as a point of contact or resource, which has the potential to expose them to

alternative methods of coping, build skill, and enhance their overall spiritual, emotional, and physical health and well-being.

Mixed methods approaches for continuous quality improvement could likewise be utilized to explore with American Indian youth and their families which existing services need improvement or to create, evaluate, or select appropriate culturally derived substance use treatment modalities in non-Native clinical settings.

### Policy

Adopting and incorporating decolonized frameworks within social work has the potential to impact county, state, and NASW substance use policy. Non-Native social workers can align with tribal partners to advocate for tribal sovereignty, agency, and self-determination (NASW, 1999) by incorporating decolonized substance use policies within their agencies. Community forums are an approach where tribal and non-Native partners can come together to review and reform substance use policies that neither reflect nor respond to American Indian worldviews. Social workers can likewise support the NASW policy statement on the health and sovereignty of indigenous people (NASW, 2009). It is important that American Indian peoples be recognized as the experts and leaders of their lives, health, and well-being.

### Research

Mixed methods can systematically uncover, expand, and add depth to topics of interest one link at a time. And when coupled with tribal, transformative, and community-based approaches, it can be used to advance new ways of knowing and understanding

substance use among American Indian youth. The utilization of mixed methods is known to social work research as researchers have embraced this strategy (for examples, see Gabrielson & Holston, 2014; Kidd et al., 2015; Begun, 2015). However, mixed methods have yet to be utilized to explore substance use and factors associated with substance use with American Indian youth or their communities. Majority of studies in the literature have relied heavily on either quantitative or qualitative methods, rarely combining the two. This dissertation serves as an example of what can be learned when the findings from one study build upon another.

### Limitations and Challenges

Although this research illuminates the unique victimization experiences of American Indian youth and their associations with alcohol and marijuana use utilizing a nationally representative sample in the first phase and speaking with a group of practitioners in the second phase, there are several limitations and challenges worth mentioning.

A considerable limitation for the phase one study was the inability to construct within the data set socio-historical context pertinent to the conceptualization of victimization and to explain how or why the relationship to alcohol and/or marijuana use exists. Phase two of this dissertation research study was necessary to bring voice, add depth, and shed light on the first phase findings. Another limitation was the cross-sectional analysis of the original data set. This analysis made it difficult to determine or infer causal relationships between victimization and alcohol and marijuana user levels.

Likewise, since the original data were collected during school hours with a self-report survey, it is possible student respondents answered in a manner considered socially desirable such that there may be discrepancies in actual and reported victimization experience or alcohol and marijuana user levels. Finally, even though the data were drawn from a nationally representative sample of American Indian youth living on or near reservations, generalizing the findings is not recommend, particularly when important historical and social contexts are absent (O'Neil & Mitchell, 1996).

Recruitment of participants for the second phase was a major challenge for this dissertation study. Even though I collaborated with a community partner to assist with recruitment and sought out methods that increased convenience and confidentiality, it was difficult to find practitioners who would complete the survey. Difficulties may be attributed to the sensitivity of the topic, practitioners getting busy and forgetting about the survey, or concern for being identified. Recruitment challenges could also be attributed to American Indian communities' reported feelings of being over researched. Practitioners may have felt similarly reticent to participate despite the importance of the topic to the community.

Unsure if an online qualitative survey would provide a rich data set, practitioners were asked at the beginning of the survey to include their email address if they were willing to be contacted with follow up questions or if they wanted to speak further on the topic. Of the five surveys returned, only two practitioners included their email addresses. Again, this could be attributed to practitioner sensitivity to the topic and concern for being identified. It could likewise reflect how limited for time the practitioners may be.

Transferring the findings to other American Indian or Indigenous youth populations is not the intent of the phase two qualitative study. This dissertation research pertains to a group of practitioners serving youth living on or near a reservation in the United States and may not reflect the experiences of urban American Indian youth, American Indian youth living on other reservations, or Indigenous youth residing internationally. Furthermore, it is not the intent to transfer the thoughts, feelings, or perceptions of the five practitioners in this study to all other practitioners either in the partnering reservation-based community or elsewhere, as they are likely not representative. It is important that this study be considered within the historical, cultural, and social contextual realities the practitioners were operating at the time of the study. Nonetheless, the perceptions of the practitioners inspire further exploration and understanding as they offer an important contribution to youth and family narratives.

### Suggestions for Future Research

Additional research is needed to better understand victimization and alcohol and marijuana use among American Indian youth living on or near reservations. Overwhelmingly, the practitioners described the youth they serve as being victimized by behaviors associated with traumatic experiences. Future research should attend to this issue with Indigenous theoretical frameworks of substance use such as the 'Indigenist' Stress Coping Paradigm developed by Walters, Simoni, and Evans-Campbell (2002). Non-Native theoretical frameworks have been criticized as pathologizing as they tend to dismiss important contextual information or traditional knowledge and strengths (Gone,

2015). Further research employing appropriate frameworks might uncover a more accurate telling of why American Indian youth are using alcohol and marijuana.

Anticipatory socialization in the first phase was found to be significantly associated with heavier levels of alcohol and marijuana use. Future research must attend to American Indian youth's perceptions of alcohol and marijuana and the role they play in the development or maintenance of their peer relationships. Equally important is the youth's perceptions of adult expectations of their (the youth's) alcohol and marijuana use. Given the practitioner's insight into the familial circumstances with which youth are vulnerable to alcohol and marijuana use, consideration of familial, social, community, and cultural norms and expectations are imperative.

Gender differences in alcohol and marijuana use among American Indian youth continue to elude researchers. Findings in the literature are mixed, offering little clarity to how or why these differences may or may not exist. None of the practitioners in the qualitative study discussed gender differences in alcohol and marijuana use nor did they discuss how the youth they serve may respond differently to victimization since these questions were not asked. While this may be the case, a deeper understanding of gender is warranted. For instance, Dr. Maria Yellow Horse Brave Heart (1999) articulated gendered historical trauma responses during an investigation of historical trauma and mental and physical health correlates with her Lakota community. These findings suggest that women had greater "conscious affective experiences of historical trauma" than their male counterparts (Brave Heart, 1999, p. 1). Moreover, numerous studies in the victimization literature similarly suggest gendered experiences. Further exploration

would prove a valuable insight to understanding if and to what extent gender matters as we consider the multidimensional realities of American Indian youth.

Lastly, it is crucial that future research continue to employ mixed methods approaches to systematically explore and understand alcohol and marijuana use among American Indian youth. We must include youth, elders, tribal leaders, and community members in all facets of the research as the methodological chain is wrought. We must continue to advocate for and advance Indigenous frameworks and methodologies. And, along the way, we must build and expand research and evaluation capacity in tribal communities. Research rooted in the knowledge and strengths of Indigenous communities has the power to change lives.



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## APPENDIX A: Data Collection Instrument for Qualitative Follow-Up

### **Exploring Victimization & Alcohol & Marijuana Use among Reservation-Based American Indian Youth**

#### *Online Qualitative Interview Protocol*

Thank you for completing this survey. Your information is important and valuable to our project. Please be as honest as possible. The following are questions about victimization and alcohol and/or marijuana use among youth in the community. May I contact you with follow-up questions? Want to talk more about the topic? Please provide your name and email address.

1. We've heard some examples from young people about their experiences with bullying, dating violence, child maltreatment as experiences of victimization. Please start by thinking about "victimization," especially what it means for **the youth you serve**, and write your ideas in the text box below.
2. From your point of view, how do you think victimization influences the youth you serve to use alcohol and/or marijuana?
3. We've heard native youth with victimization experience have reported feeling helpless or hopeless. How have the youth you serve felt about this kind of experience?
4. Another thing we've heard is that friends and family can both encourage and discourage alcohol and/or marijuana use. Who do you think are the most important people or person in lives of the youth you serve?
5. We've also heard that community events or activities have encouraged Native American youth to abstain from alcohol and/or marijuana use. What do you think these activities are and in what ways do you think they support substance use abstinence?
6. Suppose you had a minute to talk to a program developer interested in creating programming to meet the needs of native youth who have been victimized. What would you say?

7. What do you think is the most important point people should know about native youth with victimization experience?

## APPENDIX B: Qualitative Survey Email Cover Letter

### **Exploring Victimization & Alcohol & Marijuana Use among Reservation-Based American Indian Youth**

#### *Qualitative Survey Email Cover Letter<sup>1</sup>*

Thank you very much for taking the time to share your expertise. My name is Lindsay Merritt and I'm with the School of Social Work at Portland State University where I'm a doctoral student. The Family Strengths team and I have collaborated to learn about your perceptions on how victimization may influence alcohol and/or marijuana use among youth in the community.

You are invited to participate because you provide services to native-identified youth, between the ages of 12-22 years old who are living on or near the reservation, have experiences with victimization, and may have or are currently using alcohol and/or marijuana. This project is approved by the Yellowhawk Tribal Health Clinic Health Commission and the Institutional Review Board at Portland State University.

***By clicking on the online survey link below, you are consenting to be in the study.*** It should take about 20 minutes to complete. You do not need access to a computer to complete the survey since the survey website is mobile compatible. There is no compensation for the online survey, but if you are willing to be contacted for a follow up in-person interview, you will receive a \$20 payment for your time. You will be prompted to provide your name and email address in the survey. There are no known risks to completing the survey or in-person interview. If you choose to participate, please complete all of the survey questions as honestly as possible. Participation is strictly voluntary and you can discard the survey time at any time. You may also request that your answers be deleted without providing reasons for the request.

Your names will not be used in any of our reports. Reports include my dissertation, journal article, or in the transcripts of the in-person interview. All reports data will be returned to the Family Strengths team to help plan and strengthen programmatic supports for youth in the community. Your name and email address will only be used to facilitate the in-person interview. No other information is necessary.

If you have questions or concerns about this project, you are welcome to contact me by phone at (503) 891-2207 or email at [lncoffey@pdx.edu](mailto:lncoffey@pdx.edu). You are also welcome to contact my dissertation chair, Dr. Junghee Lee, by phone at (503) 725-5374 or email at [jungl@pdx.edu](mailto:jungl@pdx.edu).

Sincerely,

Lindsay Merritt

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<sup>1</sup> Adapted from "Sample Survey Cover Letter," Central Michigan University. Retrieved on October 6, 2017 from: <https://www.cmich.edu/global/Forms/Sample-Survey-Cover-Letter.pdf>.

APPENDIX C: Participant Informed Consent Document (age 18+)

**Participant Informed Consent to Participate in Research (age 18+)**

Portland State University – School of Social Work

*Exploring Victimization & Alcohol & Marijuana Use among Reservation-Based American Indian Youth*

**Who is doing the research study?** The research study is being done by Lindsay Merritt, a doctoral student in the School of Social Work at Portland State University (PSU) in Portland, Oregon, as part of the dissertation requirement.

**What's involved?** If you agree to be in the study, you will be asked about how you feel experiences with violence influences alcohol and/or marijuana use and who and/or what keeps American Indian youth from using alcohol and/or marijuana. The goals of this research study are to learn more about and better understand the relationship between violent experiences and alcohol and/or marijuana use among American Indian young people living on or near reservations, and to learn more about and better understand what keeps American Indian young people living on or near reservations from using alcohol and/or marijuana.

**Why me?** You are being asked to be in the study because you identify as a practitioner who serves American Indian youth between the ages of 12-22 years old, who are living on or near the Reservation, have experience with violence, and who are using or may have used alcohol or marijuana.

**Where?** You will be asked to be interviewed on the Reservation.

**When?** If you agree to be in the study, you will be interviewed in-person. The interview will take approximately 1½ hours to 2 hours to complete.

**What will I get in return?** If you agree to be in the study, you will receive \$20. You will receive this stipend before the start of the interview.

**Who sees my answers?** All interviews will be audio recorded and transcribed word for word. The results of this research study will be published in a dissertation and/or journal article. Your name will not be used in any reports published about this research study. The only time your answers will be shared is in the event of an emergency, such as to report child abuse or neglect, elder abuse or neglect, or if you threaten to hurt yourself or others.

**What are the risks and benefits to being in the research study?** Some of the questions may make you feel sad, mad, or stressed out. If this happens, you are encouraged to talk to someone you feel comfortable talking with. You are also encouraged to call the doctoral student Lindsay Merritt at (503)725-9631. In research studies it is possible your confidentiality could be broken or your privacy lost. While this could happen, the section



called, “How am I protected?” talks about what the doctoral student will do to make sure this does not happen.

By law, the doctoral student **MUST** report any suspected child or elder abuse or neglect and any threat of harm to yourself or others to someone who can help you. The doctoral student cannot promise to keep your name private should she need to make a report. It is possible the doctoral student may respond in one or more of the following ways: by calling 911, assessing the level of danger, and/or contacting an adult to help you.

There are no benefits to you being in this research study. However, it is believed that the knowledge gained from this research study may help in the development or adaptation of existing treatment programming and prevention messaging, may assist in the early identification of and intervention with young American Indians with violence experience who are using alcohol or marijuana a lot, and may find ways that people and/or activities keep young American Indians from using alcohol and/or drugs.

**How am I protected?** The doctoral student will keep your email address in a Word document on a secure storage server that is designed specifically for research at Portland State University and will only be accessible by the doctoral student. Your email address will only be used to schedule the interview. Transcripts from the interview will be kept in a Word document on the same secured drive as your email address. Transcripts from the interviews will not contain your name or any other identifying information. Your name will not be used in any reports published about this research study.

**Do I have to be in the research study?** NO. You get to choose if you want to be in the research study. If you choose to be in the research study, you can change your mind at any time. You also have the right to not answer questions if you do not want to. If you choose to stop being in the research study, you have the right to ask records about you be destroyed. You also have the right to see any of the forms you have completed at any time. You do not have to give any reasons for not wanting to be in the research study.

**What if I have questions about the study?** You have the right to ask, and have answered, any questions you may have about this research study. If there are questions, complaints, or concerns about the study, please contact Lindsay Merritt at (503)725-9631 or [lncoffey@pdx.edu](mailto:lncoffey@pdx.edu) or Dr. Junghee Lee at (503)725-5374 or [jungl@pdx.edu](mailto:jungl@pdx.edu). Dr. Junghee Lee is the Chair of the doctoral student’s dissertation committee.

**What if I have questions about my rights as a research participant?** All research with human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions regarding your rights as a research participant, you may call the PSU Office for Research Integrity at **(503) 725-2227** or **1(877) 480-4400**. The Office of Research Integrity is the office that supports the PSU Institutional Review Board (IRB). They are located at 1600 SW 4th Ave., Market Center Building, Ste. 620, Portland, OR 97201. For more information, you may also access the IRB website at <https://sites.google.com/a/pdx.edu/research/integrity>.

**Participant's statement:** I have read this form or this form has been read to me. I have asked questions to help me understand the form. By signing this form, I freely choose to be in the research study. A copy of the form has been given to me.

\_\_\_\_\_  
Printed Name of Research Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Investigator Signature**

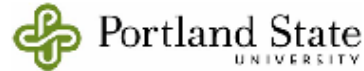
This research study has been explained to the participant and all of his/her questions have been answered. The participant understands the information described in this consent form and freely consents to participate.

\_\_\_\_\_  
Printed Name of Investigator

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## APPENDIX D: IRB Approval Memo



Post Office Box 751  
Portland, Oregon 97207-0751  
Research Integrity (Research & Strategic Partnerships)  
IRB (Human Subjects Research Review Committee)  
hsrrc@pdx.edu

503-725-2227 tel  
503-725-8170 fax  
hsrrc@pdx.edu

Date: December 11, 2017

To: Junghee Lee / Lindsay Merritt, School of Social Work

A handwritten signature in black ink, appearing to read 'Lindsey Wilkinson'.

From: Lindsey Wilkinson, IRB Chair

Re: IRB approval for your protocol # 174436, entitled: "Exploring the Association of Victimization and Alcohol and Marijuana Use Among American Indian Youth Living on or Near Reservations."

Approval-Expiration: December 11, 2017 – December 10, 2018

### Notice of IRB Review and Approval - Initial Review Expedited Review Categories 6, 7; as per Title 45 CFR Part 46

In accordance with your request, the PSU Institutional Review Board (Human Subjects Research Review Committee) has reviewed and approved the project referenced above for compliance with PSU policies and DHHS regulations covering the protection of human subjects. The IRB is satisfied that your provisions for protecting the rights and welfare of all subjects participating in the research are adequate. Please note the following requirements:

**Approval:** You are approved to conduct this research study only during the period of approval cited above, and the research must be conducted according to the plans and protocol submitted (approved copy enclosed).

**Consent:** You must use IRB-approved consent materials with study participants.

**Changes to Protocol:** Any changes in the proposed study, whether to procedures, survey instruments, consent forms or cover letters, must be outlined and submitted to the IRB immediately. The proposed changes cannot be implemented before they have been reviewed and approved by the IRB.

**Continuing Review:** This approval will expire on 12/10/2018. It is the investigator's responsibility to ensure that a *Continuing Review Report* is submitted to the IRB two months before the expiration date, and that approval of the study is kept current. The *Continuing Review Report* is available on the Research Integrity website.

**Adverse Reactions and/or Unanticipated Problems:** If any adverse reactions or unanticipated problems occur as a result of this study, you are required to notify the Research Integrity within 5 days of the event. If the issue is serious, approval may be withdrawn pending an investigation by the IRB.

**Completion of Study:** Please notify the IRB as soon as your research has been completed. Study records, including protocols and signed consent forms for each participant, must be kept by the investigator in a secure location for three years following completion of the study (or per any requirements specified by the project's funding agency).

If you have questions or concerns, please contact the Research Integrity office in Research & Strategic Partnerships at [hsrrc@pdx.edu](mailto:hsrrc@pdx.edu) or (503) 725-2227.